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ABSTRACT

A primary purpose for reducing the student-teacher ratio in the early grades is to make students more successful in their later years. This document contains two separate, but interrelated reports that examined two aspects of the 1989 Class Size Reduction (CSR) Act in Nevada. The Act called for a reduction in student-teacher ratios for selected kindergarten classes and for grades 1-3. The two studies evaluated the outcomes of CSR in all 17 Nevada school districts. The first study, which examined changes in Comprehensive Test of Basic Skills (CTBS) scores, concluded that the act was successful in reducing the student-teacher ratio within Nevada's second-grade classrooms. Team teaching helped to reduce the ratio for approximately 34 percent of the state's second-grade students. The effect of lower ratios, however, was mixed. Short-term success was reflected in higher reading and mathematics scores. However, special education status, English-Second-Language status, ethnicity, free-lunch eligibility, and class configuration were more important factors than class size in predicting a student's CTBS score. Although a portion of the differences between student scores were explained by class size and student characteristics, approximately 90 percent of the differences were unexplained by the data. Recommendations include: (1) Fully fund the CSR program for the grades it covers; (2) fund programs that target preschools and early intervention programs for special populations; (3) fully fund a comprehensive evaluation of the program; (4) develop a longitudinal evaluation design that relies on existing state-mandated testing; and (5) provide funding to include teacher and staff development. The second study surveyed all Nevada elementary school principals, all first- and second-grade teachers, and parents of students in CSR classrooms. The surveys elicited generally favorable responses toward CSR. (Contains 29 references, 56 tables, and 6 figures.) (LMI)

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A MESSAGE FROM THE SUPERINTENDENT

April 4, 1995

This book contains two separate, but interrelated reports which examine two aspects of the 1989 Class Size Reduction Act in Nevada.

- *Section 1: Student Achievement:* This section was provided under contract to the department by Northwest Regional Educational Laboratory (NWREL) and examines changes in Comprehensive Test of Basic Skills (CTBS) scores.

- *Section 2: Opinion Surveys:* This report, compiled by the Testing and Evaluation Unit in Clark County School District, provides important insights into the perceptions of the class size reduction program as reported by teachers, administrators, and parents.

Taken together, these two reports provide a limited evaluation of the effectiveness of the class size reduction program. Examining test scores and attitudes is not adequate; the results should not be considered conclusive at this point in time. The intent of class size reduction was to ensure that children in the early years of schooling receive individualized attention and develop the basic skills and positive attitudes that are critical to success in later years. A more comprehensive and longitudinal study that examines teacher and student interactions in the class room, effectiveness of various teaching methods, and completion rates should be considered.

Until this type of study is put in place and maintained over a number of years, our citizens must draw from the limited knowledge now available. Evidence from the present study indicates that class size reduction has a small but statistically significant positive impact on student achievement. Disconcerting family and economic conditions of our children have a much stronger negative influence.

Sincerely,

Mary L. Peterson

Mary L. Peterson
Superintendent of Public Instruction

An Equal Opportunity Agency

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The Nevada Class Size Reduction Evaluation Study 1995

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Executive Summary

This evaluation report is an analysis of the effects of the Class Size Reduction Act which was passed by the Legislature in 1989. This Act called for a reduction in student to teacher ratios for selected kindergarten classes and for first, second and third grade classes, to be phased in over a period of years. A district average of a 15 to 1 student to teacher ratio was mandated for these grades. At this time the program has been implemented through second grade. This evaluation focuses on second grade students although some data for third and fourth grade students was also used. In general, the range of all actual class sizes has decreased over the years the program has been in effect. This study demonstrates that student to teacher ratios have been successfully reduced since the implementation of the Act and presents the following findings:

Next Grade Performance

A primary purpose for reducing the student-teacher ratio in the early grades is to make students more successful in their education in later years. In this analysis third grade students who had attended second grade in Nevada were compared with those who had not and second grade students who had attended first grade in Nevada were compared with those who had not done so. The results were:

- Students who attended Nevada schools during the second grade had significantly higher third grade reading and mathematics scores than did students who did not attend second grade with reduced sized classes in Nevada or for whom second grade attendance could not be determined by the teacher.

- Students who attended Nevada schools during the first grade had significantly higher second grade reading and mathematics scores than did students who did not attend first grade with reduced size classes in Nevada or for whom first grade attendance could not be determined by the teacher.

Third Grade Performance and Attendance in Nevada Second Grade for Sub-groups of Students

- Special education students in rural and Washoe schools showed some evidence of benefiting from attending second grade in Nevada. Their mathematics scores were significantly higher in 1993 and their reading scores were significantly higher in 1994. There were no significant differences by second grade attendance for special education students in Clark County.

- In 1993 third grade students in the rural and Washoe districts who were eligible for free or reduced cost lunch scored higher in mathematics but lower

in reading if they attended Nevada schools in second grade. There were no significant differences for these students in 1994 in any of the districts.

- While students enrolled in the ESL programs had higher reading and mathematics scores if they attended Nevada schools in second grade, the differences were not significant in either year.

- Third grade White students tended to score significantly higher in reading and mathematics if they attended second grade in Nevada schools. Students of other ethnic backgrounds either showed no difference by second grade attendance or the results were mixed.

- In 1993 females scored significantly higher in reading if they attended Nevada schools in second grade; males scored significantly higher in both reading and mathematics if they had attended second grade in Nevada. In 1994 females scored significantly higher in both reading and mathematics if they had attended Nevada schools in second grade; males scored higher in both subjects, but not significantly so.

Class Size

For the purposes of this evaluation a student-teacher ratio of 15 or less to 1 was defined as "small" and a student-teacher ratio of over 15 to 1 was defined as "large". It should be noted that the differences between these two class size classifications are, in reality, very small. There were fewer extremes in actual class sizes in the second grade in 1993 and 1994 than there were in 1992. Another factor is that the smaller ratio classrooms in 1993 and 1994 tended to be team taught rather than self-contained.

- In 1993 smaller second grade classrooms were associated with higher mathematics scores, but lower reading scores in the rural and Washoe districts. In Clark there were no significant differences in reading or writing scores by size of class.

- In 1994 smaller second grade rural and Washoe classrooms were associated with lower reading scores but mathematics scores were not affected by classroom size.

Classroom Configuration

The two major types of classroom configurations in the second grade classes were self-contained and team taught. Self-contained means one teacher and students in a classroom; team taught means two teachers and their students in one classroom.

- In 1993 in second grade rural and Washoe districts, self-contained classrooms were associated with higher reading scores but lower math scores. In 1994 self-contained classrooms were associated with higher scores in both reading

and mathematics. In Clark County there were no significant differences in scores by classroom configuration.

•Student Characteristics

This study investigated the relationship of class size to various student characteristics. These included: 1) special education 2) English as a Second Language 3) low socio-economic status 4) ethnicity and 5) gender. It should be noted that the numbers of students with the first three characteristics have increased in Nevada over the years that the class size reduction program has been in effect.

- When compared as a group to all other students, special education, English as a Second Language, low socio-economic students, and students of ethnic backgrounds except White and Asian all scored significantly lower in reading and mathematics scores.

- When the reading and mathematics scores of these subgroups were examined by a second grade experience in 15 or less to 1 or over 15 to 1 classrooms, there were few significant differences and these were mixed; in some cases higher scores were associated with small classes and in some cases with larger classes.

- When students were compared by gender alone, females scored significantly higher in reading while males scored significantly higher in mathematics scores. Differences in class size did not affect scores for females. For males, only reading scores in 1993 in rural and Washoe districts were related to class size, with higher scores in larger classes.

Gains in Reading and Mathematics Performance

For the first time a longitudinal study of Nevada students who had experienced class size reduction was attempted. The gains in reading and math scores between second and third grade and second and fourth grade were compared by whether the class size experienced in second grade was small (15 or less to 1) or large (over 15 to 1).

- There were no significant effects on gains in student test scores by a second grade experience in smaller or larger classrooms with the exception of gains in mathematics by rural and Washoe students in 1994. However, there was a tendency for greater gains in mathematics to be associated with larger second grade classes and greater gains in reading to be associated with smaller second grade classes.

This study concludes that class size has a small but significant effect on student performance in reading and mathematics. Recommendations regarding the Class Size Reduction Program can be found on page 36.

Introduction

Description of the Project

The Class Size Reduction Act was passed during the 1989 Legislature and implementation began in the fall of 1990. The original Act called for a reduction of the student-teacher ratio to 15 to 1 in high risk kindergarten classes, and in all first, second and third grade classes. This reduction was to be phased in over a period of three years. Thus the new ratios went into effect for the selected kindergarten classes and first grade in the 1990-91 school year. In 1991-92 the class sizes were reduced in the second grade. Implementation in the third grade, scheduled to occur in the 1992-93 school year, was delayed by the consent of the District Superintendents due to the state's budgetary problems.

When the Act was implemented, 23 additional kindergarten teachers and 980 additional first and second grade teachers statewide were hired with Class Reduction funds. Only the districts of Esmeralda and Eureka were not affected as their first and second grade classes were already at the required ratio.

Districts have met the challenge of finding the necessary classroom space for the smaller class ratio classes. As sufficient facilities for self-contained (single teacher) classrooms were not always available for all classes, districts turned to alternative class configurations which would still meet the required student teacher ratio. The most frequently used alternative has been the team taught class in which two teachers and approximately 30 students share one classroom. Other configurations, less frequently used, have been: multi-grade classrooms, pull-out instruction, collaborative/flexible grouping, and transitional grade/developmental classrooms.

The program was evaluated (Snow, 1993) to determine whether the class size reduction had taken place, whether it was perceived as being successful, and whether it resulted in higher standardized test scores. That evaluation concluded that the class sizes were lower and the project was perceived successful. The test scores for second graders overall were not significantly affected by class size, but the scores for some subgroups of second graders showed some differences.

Using more data points and including data from "graduates" of the CSR program, the present evaluation re-examined the link between lower class sizes and test scores using test scores from the 1992-93 and 1993-94 school years. The first steps toward a longitudinal study of second graders have been taken by following a cohort of second grade students through their third and fourth grade testings. This cohort consisted of 2299 students who were in the second grade in 1992 and 2465 students who were in second grade in 1993.

Changes In Related Factors

During the years since the start of the Class Size Reduction, there have been many other changes within Nevada schools. As Nevada has recently been the fastest growing state in the nation, the elementary school enrollment has grown also. There is evidence that the number of children with special needs has increased as well.

For example, according to Nevada statistics compiled by the American School Food Service Association, the percentage of free and reduced cost lunch meals to total meals served has increased from 37.5% in 1991 to 51.4% in 1994. The actual number of free or reduced cost lunch meals served per day increased from 24,507 in 1991 to 45,876 in 1994. There was an increase in percent of students receiving free and reduced cost lunches over the five year period (1990 to 1994) for most of the districts. In some districts the increase was over 100%.

The number of Limited English Proficient students in the state has more than doubled from 7,362 in 1989-90 to 15,000 in 1994-95. A 1991-92 LEP Survey and Needs Assessment conducted by the Department showed the largest numbers of these children to be in grades one to four.

Likewise the special education child count prepared by the Department reveals an increase in every year from 16,640 in 1989 to 26,363 in 1994. The rate of increase over the previous year has also varied from 6.4% in 1989 to 12.25 in 1992. The majority of special education students were either placed in a resource room and received special education and related services outside the regular classroom between 21% and 60% of the school day or were placed in a regular classroom but received special education and related services outside that classroom for less than 21% of the school day.

A variety of reports, including the 1992 National Assessment of Educational Progress (NAEP 1994) have determined that community and family characteristics are powerful factors influencing student achievement. There have been significant increases in households in poverty in Nevada (U.S. Department of Commerce, 1993), and this is considered to have influenced student performance on standardized tests. A review of poverty levels in Nevada illustrates the rapid growth:

	% Nevada Population in Poverty	No. Persons
1982	7.8%	70,000
1990	9.8%	119,000
1991	11.4%	141,000
1992	14.4%	188,000

This rapid growth in poverty places Nevada as one of only five states which have shown statistically significant increases over this time period.

Another student factor which has been shown to strongly influence student achievement is single parent homes. Like poverty, the number of single parent households with children has increased markedly in Nevada, particularly since 1990. To illustrate, in 1980, 23,417 households were headed by only one parent. By 1990, these households had increased 64% to 38,497.

Methods and Variables Used in the Evaluation

School districts throughout Nevada use the Comprehensive Tests of Basic Skills, Fourth Edition (CTBS/4) to test students in elementary grades. The tests are divided into reading, language, mathematics, and social studies subtests. Each student receives a total reading "scale" score and a total mathematics "scale" score. These scale scores are constructed to provide an estimate of achievement that is comparable from fall to spring and across grade levels. The scores range from 0 to 999.

Sixteen of Nevada's seventeen school districts tested second and/or third grade students during the spring of 1993 and 1994. In 1993 the grades for mandatory testing were changed from the third, sixth, ninth and twelfth grades to the fourth, eighth, and eleventh grades. While many school districts continued to test second and third grade students, data were not as universally available as in previous years.

Unlike the other districts, Clark County tested students in the fall of their third grade year in 1993 and of their fourth grade year in 1994.

The results of the testing were forwarded to the Nevada Department of Education for inclusion in the CSR project evaluation. Each student record was coded to describe a variety of characteristics about the student. The variables which were drawn from these codes include:

- Ethnicity
- Special education status
- English as a Second Language (ESL) status
- Eligibility for free or reduced fee lunch (as an indicator of socio-economic status)
- Gender
- Whether student attended third grade in Nevada (asked for fourth graders)
- Whether student attended second grade in Nevada (asked for third and fourth graders)
- Length of time in second grade
- Length of time in first grade

In addition to these variables, school districts were asked to include the names of students with 1993 and 1994 test scores and to resubmit data from 1992 with student names included. In order to protect student confidentiality, the data were handled in accordance with the guidelines of the Family Educational Rights and Privacy Act of 1974 and NAC 385.700. These data were used to study gains made by individual students in reading and mathematics achievement. Over half of the districts provided student names.

Student records were also coded with information about the students' classrooms. These variables included:

- School district
- Number of students in classroom in ranges of five students as follows:

1- 5 students	26-30 students
6-10 students	31-35 students
11-15 students	36-40 students
16-20 students	More than 40 students
21-25 students	

- Class configuration (i.e., self-contained, team taught, etc.)

Students were included in the study if:

- Their district tested students in their grade during 1993 or 1994
- They were not in a special education classroom with fewer than 10 students
- They were in a self-contained or team taught classroom
- They were not in a "home school"

The evaluation was designed to answer seven questions:

1. Did reducing the class size for second grade students result in higher test scores?

2. Did reducing the class size through team teaching have a different result from reducing it in a self contained class?

3. Did students with particular characteristics benefit more from the reduced class sizes?

4. Did students who were enrolled in Nevada's reduced size second grade classes benefit in the third grade, and did students enrolled in Nevada's first grade benefit in the second grade?

5. Did third grade students benefit from smaller third grade class sizes which were unrelated to the Class Size Reduction initiative?

6. Did students with particular characteristics benefit more from a reduced class size in second grade by the time they were tested in third grade?

7. Was there a difference between the gains from second grade to third grade and from second grade to fourth grade which were made by students in smaller second grade classrooms and gains which were made by the students in larger second grade classrooms?

Results

The study includes students from all of Nevada's 17 school districts. Clark County School District was treated separately throughout the evaluation because they test students during the fall of a school year rather than in the spring. That district submitted a sample of 412 students from the third grade in 1993 rather than all of the approximately 10,000 targeted students. In 1994 Clark County did not test third grade students, but submitted the results from over 10,000 fourth grade students. In analyzing the Clark County results, the fall tests for the third and fourth grades are compared with the spring tests for the second and third grades respectively.

In the rural and Washoe school districts in 1993 there were 5,326 second grade students and 6,523 third grade students included in the study. In 1994 there were 5,259 second grade students, 5,853 third grade students, and 6,693 fourth grade students included.

Many districts did not test students in all of the grades being studied. If a school district did not test for one of the grades in a particular year, then the results exclude that district from the evaluation for that year.

The first step in evaluating the Class Size Reduction project was to determine whether class sizes were actually reduced. In an earlier evaluation study (Snow, 1993), class sizes were found to be at or below the targeted level of 15 students per teacher in 44% of Nevada's 1992 classrooms, compared with the 9% in the year immediately preceding the Class Size Reduction. That trend toward lower student to teacher ratios dropped slightly for 1993 and 1994. The ratio was at or below the targeted level for approximately 33% of the students during 1993 and 39% in 1994. There were fewer students in classrooms with fewer than ten students and in classrooms with more than 20 students.

The following sections present answers to the seven research questions posed above. Data are included to support the findings. More detailed data, including more complete statistics such as standard deviations, F Ratios, and numbers of students are included in a separate technical appendix which is available upon request from the Nevada Department of Education.

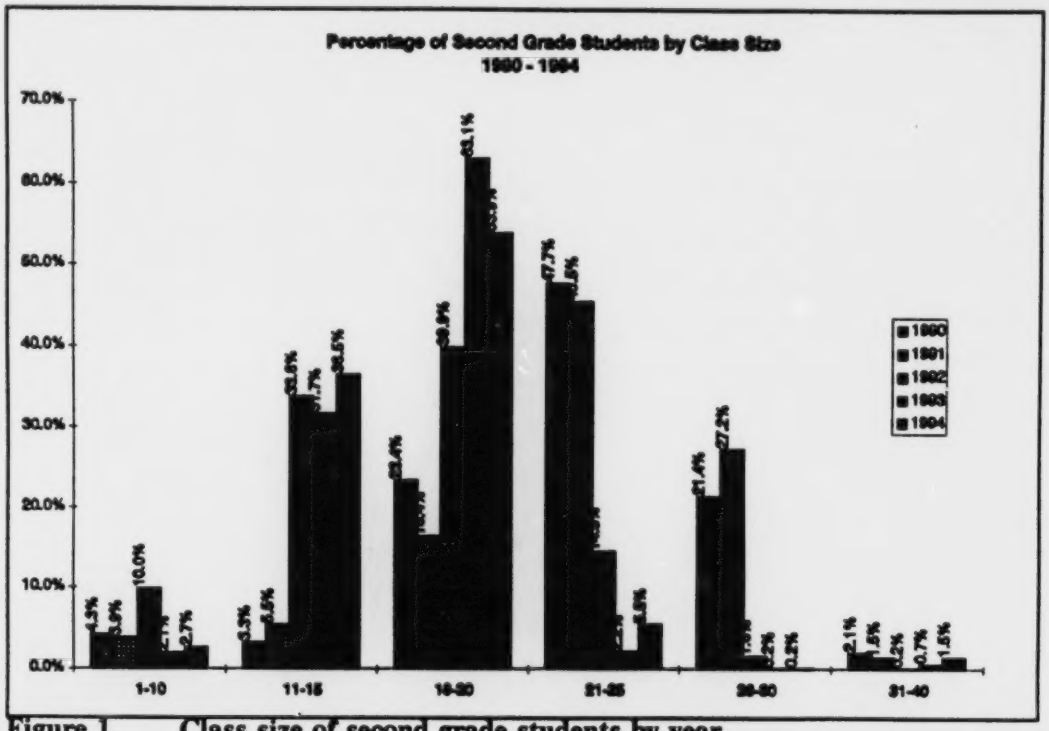

Figure 1. Class size of second grade students by year.

Question 1: Did reducing the class size for second grade students result in higher test scores?

To answer this question the Total Reading Scale Score and the Total Reading Math Scale Score were compared for students in classes within the targeted student-teacher ratio of 15 or less to one and students in classes above the targeted ratio, over 15 to one. In reality the range of differences in class sizes has decreased since 1991-92. Actual size differences between the designated "small" and "large" classes are small in most cases. In answering question one, it is important to consider whether class size made a difference when considering its effect separate from all of the individual student characteristics. Since the implementation of Class Size Reduction has been statewide, the affects of student characteristics must be factored out of the data statistically, using a multiple regression analysis, to see whether the class size or configuration was an important variable.

The multiple regression was done only for rural and Washoe students since the Clark County sample was not large enough for this analysis.

Finding: Class size had a role in determining student scores for reading and mathematics in 1993 and reading scores in 1994 (see Table 1).

The role of class size, while significant, was small relative to individual characteristics of student. The results of a multiple regression can be given as the percentage of variation among student scores which is "explained" by each variable. That is, how much can one predict about a student's score from

knowing that student's class size. The table below shows the contribution of class size when considered separately from class configuration and other characteristics.

Table 1

Role of Class Size in Student Scores

	1993	1994
Percentage of reading scores explained by class size	.1%	.2%
Percentage of reading scores explained by student characteristics	10.5%	10.5%
	1993	1994
Percentage of mathematics scores explained by class size	3.4%	0%
Percentage of mathematics scores explained by student characteristics	7.4%	8.2%

Knowing that class size played a role, the data could be analyzed to determine what the relationship was between class size and CTBS scores.

Finding: *In 1993 smaller classrooms were associated with higher mathematics scores, but lower reading scores (see Table 2).*

In 1993 CTBS/4 reading scores for rural and Washoe students who were in classrooms within the target student-teacher ratio (15:1) were significantly lower than those of students in classrooms above the target ratio. Conversely, the CTBS/4 mathematics scores for students in the classrooms within the target student-teacher ratio were higher than those of students in larger classrooms. Put more simply, in 1993 smaller classrooms were associated with higher mathematics scores, but lower reading scores. Students in the Clark County sample did not show differences in either reading or mathematics scores based on the size of their classrooms.

Finding: *In 1994 smaller rural and Washoe classrooms were associated with lower reading scores but mathematics scores were not affected by classroom size (see Table 2).*

The 1994 the reading scores for students in classrooms within the target student-teacher ratio were also significantly lower than those for students in larger classrooms while the mathematics scores were not significantly different between the two groups.

Table 2

Student Scores by Class Size

	1993		1994		Clark 1993	
Reading	Score	%tile	Score	%tile	Score	%tile
Classrooms with 1-15 students	640	42	634	38	658	54
Classrooms with 16 or more students	645	46	639	41	659	54
p	*.01**		*.01**		*.86*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Classrooms with 1-15 students	624	56	619	53	644	67
Classrooms with 16 or more students	621	54	620	53	641	65
p	*.02**		*.62*		.71	

*This difference is significant.

Question 2: Did reducing the class size through team teaching have a different result from reducing it in a self contained class?

Finding: ***In 1993, self-contained classrooms were associated with higher reading scores but lower math scores. In 1994 self-contained classrooms were associated with higher scores in both reading and mathematics (see Table 3).***

Second grade students in rural and Washoe self-contained classrooms scored higher in reading than students from team taught classrooms 1993. The students from self-contained classrooms scored significantly lower in mathematics than did students from classrooms with team teaching.

The tendency toward higher reading scores in self-contained was even more pronounced in 1994. For mathematics scores the tendency was reversed from the previous year, with higher scores in the self-contained classrooms than in the team taught classrooms.

There were no differences based on classroom configuration for the Clark County sample.

Table 3

Scores by Classroom Configuration

Reading	1993 Score	%tile	1994 Score	%tile	Clark 1993 Score	%tile
Self-contained	644	45	641	43	659	54
Team taught	640	42	630	35	658	54
p	*.06*		*<.01**		.84	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Self-contained	621	54	623	55	643	66
Team taught	625	57	613	48	641	65
p	*.03**		*<.01**		.74	

**This difference is significant*

There is a strong correlation between classroom configuration and classroom size as they are defined for this study. The smaller classrooms (1-15 students) tended to be team taught while the larger classrooms tended to be self-contained. When both class configuration and size of class are compared at once, the class configuration is more important in determining the scores than is class size. There were no significant interactions between class size (before adjusting for team teaching) and class configurations did not result in opposite results from other combinations.

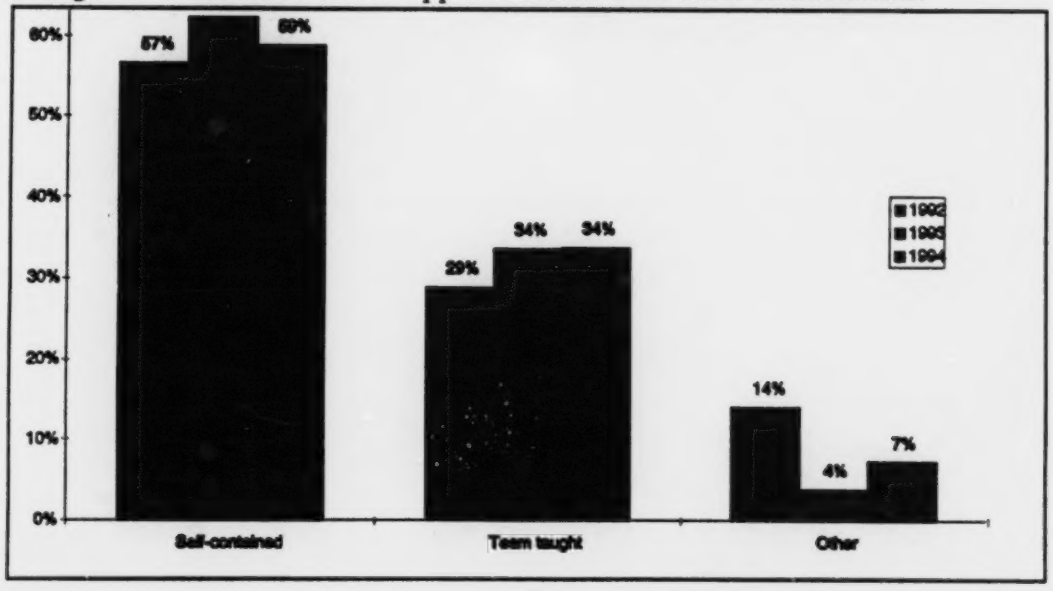

Figure 2. Class configuration for second grade students 1992-1994.

Question 3. Did students with particular characteristics benefit more from the reduced class sizes?

Special Education Students

Both reading and mathematics scores were significantly lower for special education students than for other students in both 1993 and 1994.

Table 4

Scores by Participation in Special Education

	1993		1994		Clark 1993	
Reading	Score	%tile	Score	%tile	Score	%tile
Special education	571	11	565	10	595	16
No special education	644	45	638	40	662	56
p	*<.01**		*<.01**		*<.01**	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Special education	578	25	566	19	614	41
No special education	624	56	621	54	643	66
p	*<.01**		*<.01**		*<.02**	

**This difference is significant*

Finding: *Special education students in the rural and Washoe districts benefited significantly from smaller class sizes in their mathematics scores, but not their reading scores in 1994 (see Table 5).*

In 1993 there were no significant differences in reading or mathematics scores based on class size in any of the districts.

Table 5

Special Education Scores by Class Size

Reading	1993 Score	1993 %tile	1994 Score	1994 %tile	Clark 1993 Score	Clark 1993 %tile
1-15 students	566	10	573	12	612	23
Over 15 students	577	13	563	10	589	14
p	*.41*		*.49*		*.53*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
1-15 students	578	25	585	29	622	49
Over 15 students	580	26	556	15	611	39
p	*.82*		*.01**		*.71*	

**This difference is significant*

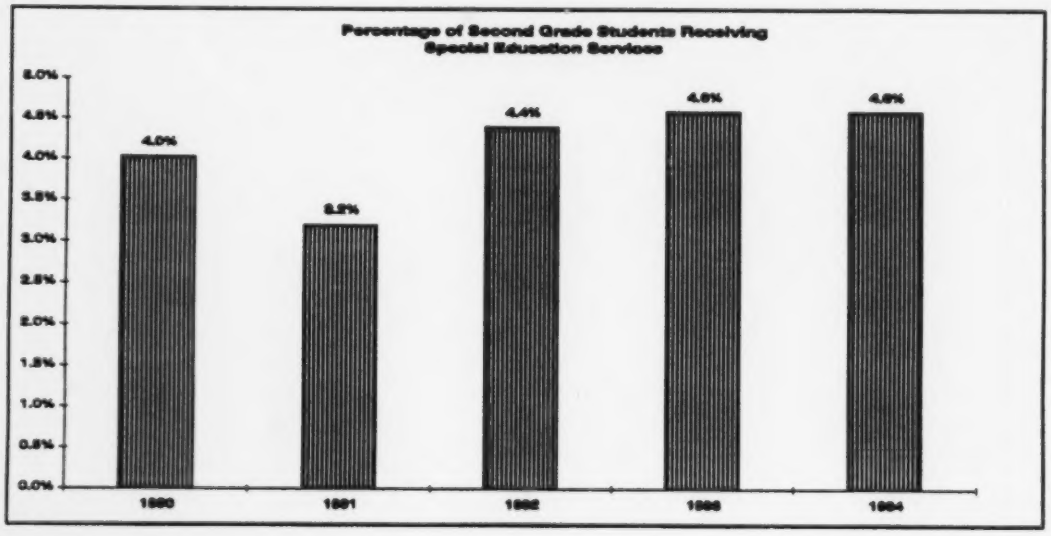

Figure 3. Special education enrollment by year.

ESL Students

Both reading and mathematics scores were significantly lower for ESL students than for other students in both 1993 and 1994. No ESL student scores were reported from Clark County.

Table 6

Scores by ESL Participation

	1993		1994	
Reading	Score	%tile	Score	%tile
ESL	586	15	593	20
No ESL	644	45	637	40
p	*<.01**		*<.01**	
Mathematics	Score	%tile	Score	%tile
ESL	582	27	590	32
No ESL	624	56	620	53
p	*.01**		*<.01**	

**This difference is significant*

Students in different sizes of ESL classes did not differ significantly in either reading or mathematics performance (Table 7).

Table 7

ESL Scores by Class Size

	1993		1994	
Reading	Score	%tile	Score	%tile
1-15 students	579	13	585	20
Over 15 students	594	17	598	20
p	*.11*		*.33*	
Mathematics	Score	%tile	Score	%tile
1-15 students	585	29	588	31
Over 15 students	580	26	592	33
p	*.53*		*.67*	

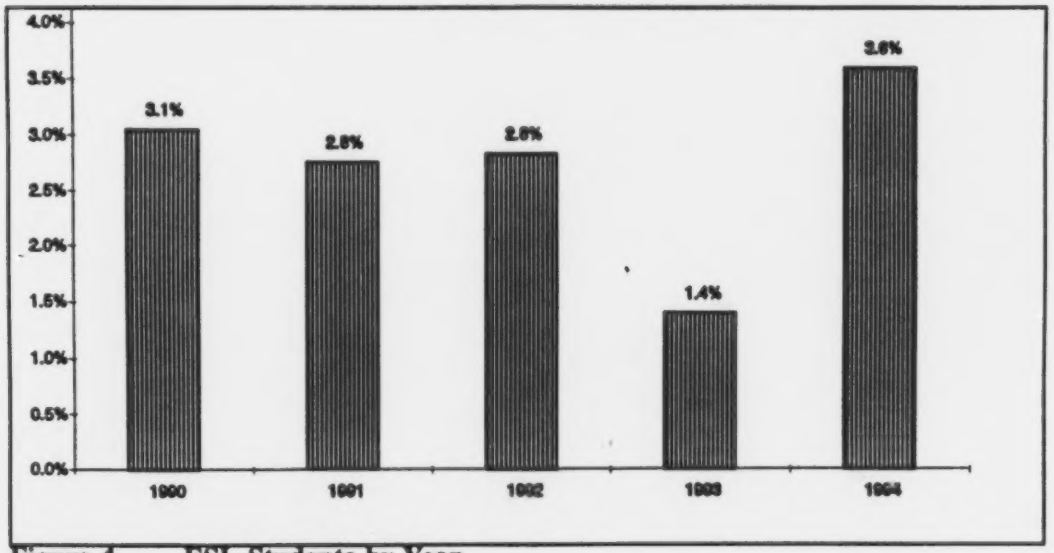

Figure 4. ESL Students by Year.

Low SES Students

Both reading and mathematics scores were significantly lower for low socioeconomic status students than for other students in both 1993 and 1994.

Table 8

Scores by SES

	1993		1994		Clark 1993	
Reading	Score	%tile	Score	%tile	Score	%tile
Free Lunch	619	29	609	24	633	35
No Free Lunch	653	52	648	48	669	61
p	<.01*		<.01*		<.01*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Free Lunch	604	42	598	38	615	42
No Free Lunch	631	61	629	60	653	73
p	<.01*		<.01*		<.01*	

*This difference is significant

In 1993 the rural and Washoe students who received free or reduced price lunches had significantly higher reading scores in larger classes than in smaller classes. The mathematics scores of these students were essentially the same no matter what the size of the class. In Clark there were no significant differences. In 1994 there were no significant differences in reading scores but mathematics scores were significantly higher in smaller classrooms.

Table 9

Low SES Scores by Class Size

	1993		1994		Clark 1993	
Reading	Score	%tile	Score	%tile	Score	%tile
1-15 students	615	27	606	22	642	41
Over 15 students	623	31	612	25	630	33
p	*.03**		*.20*		*.31*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
1-15 students	605	43	602	40	620	47
Over 15 students	603	41	596	36	613	41
p	*.44*		*.05**		*.53*	

**This difference is significant*

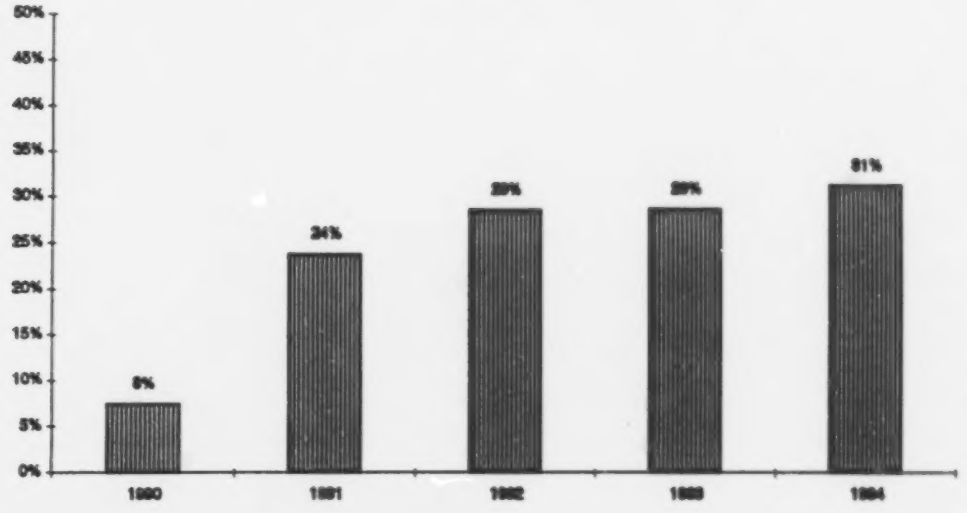

Figure 5. Low SES Students by Year.

Minority Students

Both reading and mathematics scores were significantly lower for non-Asian minority students than for other students both in 1993 and 1994.

Table 10

Scores by Ethnicity

	1993		1994		Clark 1993	
Reading	Score	%tile	Score	%tile	Score	%tile
American Indian/Alaskan native	622	31	615	27	655	51
Asian	643	45	634	38	671	63
Black	615	27	609	24	625	30
White	648	48	642	44	667	60
Hispanic	608	23	605	22	643	42
p	*<.01**		*<.01**		*<.01**	
Mathematics	Score	%tile	Score	%tile	Score	%tile
American Indian/Alaskan native	606	43	602	40	646	69
Asian	626	58	620	53	678	89
Black	597	37	590	32	603	33
White	626	58	623	55	650	71
Hispanic	600	39	599	38	629	54
p	*<.01**		*<.01**		*<.01**	

**This difference is significant*

Finding: *Reading scores were significantly higher in larger classrooms only for rural and Washoe American Indian/Alaska Native students in 1994 (Table 11) and for Hispanic students in 1993 (Table 15). However in Clark County in 1993 Hispanic students scored higher in reading in small classes (Table 15).*

Finding: *Mathematics scores were significantly higher in smaller classrooms only for rural and Washoe White students in 1993 (Table 14).*

The size of the classroom did not significantly affect reading or mathematics scores for Black or Asian students.

Table 11

American Indian/Alaska Native Scores by Class Size

	1993		1994	
Reading	Score	%tile	Score	%tile
1-15 students	619	29	600	20
Over 15 students	625	32	627	33
p	*.59*		*.03**	
Mathematics	Score	%tile	Score	%tile
1-15 students	600	39	593	34
Over 15 students	613	48	609	45
p	*.15*		*.11*	

**This difference is significant*

There were too few American Indian/Alaska native students in the Clark County sample to analyze by class size.

Table 12

Asian/Pacific Islander Scores by Class Size

	1993		1994	
Reading	Score	%tile	Score	%tile
1-15 students	631	36	633	38
Over 15 students	652	51	636	39
p	*.14*		*.77*	
Mathematics	Score	%tile	Score	%tile
1-15 students	627	58	632	62
Over 15 students	629	60	636	65
p	*.83*		*.77*	

There were too few Asian/Pacific Islander students in the Clark County sample to analyze by class size.

Table 13

Black Scores by Class Size

	1993		1994		Clark 1993	
Reading	Score	%tile	Score	%tile	Score	%tile
1-15 students	610	24	602	21	630	33
Over 15 students	621	30	617	28	624	29
p	*.48*		*.28*		*.69*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
1-15 students	592	33	588	31	597	29
Over 15 students	606	43	593	34	605	34
p	*.27*		*.68*		*.63*	

Table 14

White Scores by Class Size

	1993		1994		Clark 1993	
Reading	Score	%tile	Score	%tile	Score	%tile
1-15 students	648	48	642	44	662	56
Over 15 students	649	49	644	45	669	61
p	*.46*		*.33*		*.33*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
1-15 students	630	60	624	56	654	75
Over 15 students	624	56	624	56	649	71
p	*<.01**		*.90*		*.48*	

**This difference is significant*

Table 15

Hispanic Scores by Class Size

Reading	1993 Score	1993 %tile	1994 Score	1994 %tile	Clark 1993 Score	Clark 1993 %tile
1-15 students	601	20	602	21	682	71
Over 15 students	617	28	609	24	631	34
p	*.01**		*.29*		*.03**	
Mathematics	Score	%tile	Score	%tile	Score	%tile
1-15 students	603	41	600	39	653	73
Over 15 students	596	36	599	38	621	48
p	*.17*		*.88*		*.16*	

**This difference is significant*

Hispanic, American Indian/Alaska native, and Asian students were slightly more likely to be in smaller classrooms than were White or Black students, but the differences were not significant.

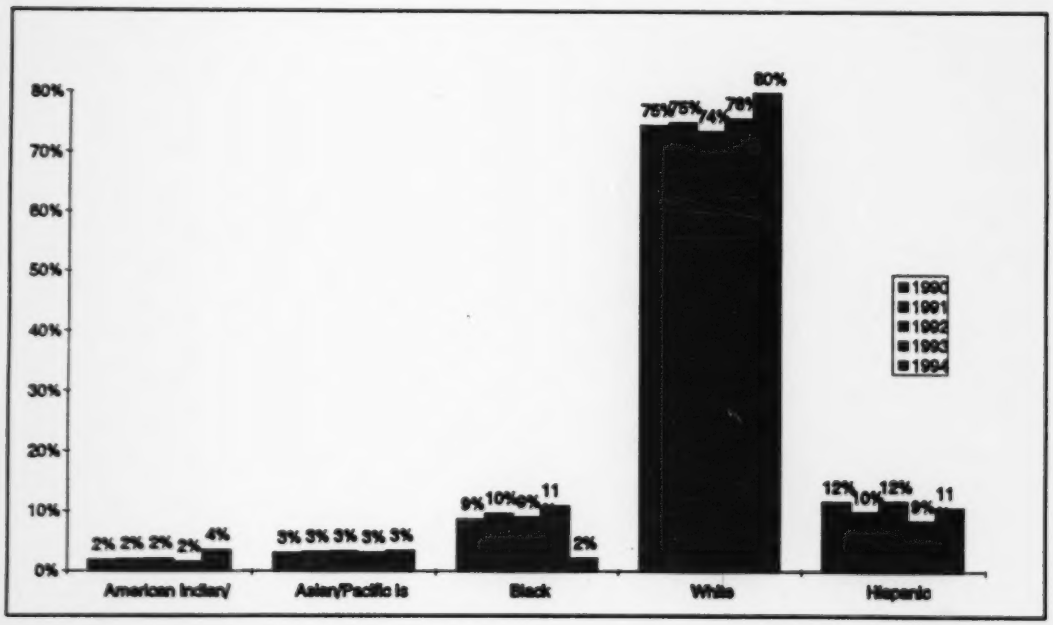

Figure 6. Student Ethnicity by Year.

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Gender

Females scored significantly higher in reading and significantly lower in mathematics than did males in 1993 and in 1994 in rural and Washoe districts. (Table 16). There were no significant differences in Clark.

Table 16

Scores by Gender

	1993		1994		Clark 1993	
Reading	Score	%tile	Score	%tile	Score	%tile
Male	640	42	630	35	655	51
Female	646	47	639	41	664	58
p	*.01**		*<.01**		*.11*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Male	622	55	615	50	644	67
Female	618	52	610	46	640	63
p	*<.01**		*<.01**		*.50*	

**This difference is significant*

For females neither reading or mathematics scores were significantly affected by class size in either year (Table 17). The only significant difference by class size for males in either year were the 1993 reading scores for rural and Washoe students which were higher in larger classes (Table 18).

Table 17

Female Scores by Class Size

	1993		1994		Clark 1993	
Reading	Score	%tile	Score	%tile	Score	%tile
1-15 students	643	45	636	39	661	56
Over 15 students	648	48	643	45	664	58
p	*.11*		*.06*		*.65*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
1-15 students	619	53	608	45	639	63
Over 15 students	617	51	612	48	641	65
p	*.51*		*.30*		*.80*	

Table 18

Male Scores by Class Size

	1993		1994		Clark 1993	
Reading	Score	%tile	Score	%tile	Score	%tile
1-15 students	635	39	628	34	656	52
Over 15 students	643	45	632	37	654	50
p	*.01**		*.32*		*.80*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
1-15 students	622	55	613	48	651	72
Over 15 students	623	55	617	51	642	66
p	*.67*		*.25*		*.35*	

**This difference is significant*

Question 4. Did students who were enrolled in Nevada's reduced size second grade classes benefit in the third grade, and did students enrolled in Nevada's first grade benefit in the second grade?

Finding: ***Students who attended Nevada schools during the second grade had significantly higher third grade reading and mathematics scores than did students who did not attend second grade in Nevada or for whom second grade attendance could not be determined by the teacher (see Table 19).***

These results were significant for both reading and mathematics scores and for both years of the evaluation. Data from Clark County represents students who were tested in the fall of their fourth grade year and were coded either "Attended Nevada Second grade" or "Cannot determine."

Table 19
Third Grade Scores by Attendance in Second Grade

Reading	1993 Score	1993 %tile	1994 Score	1994 %tile	Clark 1993 Score	Clark 1993 %tile
Attended Nevada 2nd grade	680	50	682	52	673	43
Attended other 2nd grade	674	45	670	42		
Could not determine	652	29	654	30	670	41
p	*<.01**		*<.01**		*.02**	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Attended Nevada 2nd grade	674	49	675	50	670	52
Attended other 2nd grade	666	43	666	43		
Could not determine	644	26	658	36	667	49
p	*<.01**		*<.01**		*.02**	

**This difference is significant*

Finding: *Students who attended Nevada schools during the first grade had significantly higher second grade reading and mathematics scores than did students who did not attend first grade in Nevada or for whom first grade attendance could not be determined by the teacher (see Table 20).*

Second graders who attended Nevada schools in first grade did better than those who did not. The scores are significantly higher except for the mathematics scores in 1993.

Table 20

Second Grade Scores by Attendance in First Grade

Reading	1993 Score	1993 %tile	1994 Score	1994 %tile
Attended Nevada 1st grade	643	45	639	41
Attended other 1st grade	637	40	627	33
p	*.04**		*<.01**	
Mathematics	1993	%tile	1994	%tile
Attended Nevada 1st grade	623	55	621	54
Attended other 1st grade	619	53	613	48
p	*.09*		*.01**	

**This difference is significant*

Question 5. Did third grade students benefit from smaller third grade class sizes which were unrelated to the Class Size Reduction initiative?

Finding: ***There were no significant differences based on class size between reading or mathematics scores of rural and Washoe third graders; Clark County students from larger classrooms scored higher in both reading and mathematics (see Table 21).***

The large differences in mean scores for Clark County students may have been related to placing students with special needs in smaller classrooms. Significantly more minority students and low SES students were placed in smaller classrooms.

Table 21

Third Grade Scores by Class Size

	1993		1994		Clark 1994	
Reading	Score	%tile	Score	%tile	Score	%tile
1-15 students	683	53	684	53	660	33
Over 15 students	679	49	680	50	673	43
p	*.36*		*.49*		*<.01**	
Mathematics	Score	%tile	Score	%tile	Score	%tile
1-15 students	673	49	675	50	659	41
Over 15 students	673	49	675	50	670	52
p	*.92*		*.93*		*<.01**	

**This difference is significant*

Question 6. Did students with particular characteristics benefit more from a reduced class size in second grade by the time they were tested in third grade?

Special Education Students

Finding: *Special education students in rural and Washoe schools benefited from having attended second grade in Nevada. Their mathematics scores were significantly higher in 1993 and their reading scores were significantly higher in 1994. There were no significant differences by second grade attendance for special education students in Clark County (see Table 22).*

Table 22

Special Education Third Grade Scores by Nevada Second Grade Attendance

	1993		1994		Clark 1994	
Reading	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	626	15	629	17	645	24
Attended other 2nd grade	614	11	601	8		
Could not determine	558				642	22
p	*.11*		*.03**		*.70*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	620	14	624	15	643	27
Attended other 2nd grade	610	10	612	11		
Could not determine	538				639	24
p	*.01**		*.28*		*.43*	

**This difference is significant*

ESL Students

While students enrolled in ESL programs had higher reading and mathematics scores if they attended Nevada schools in second grade, the differences were not significant in either year.

Table 23

ESL Scores Third Grade by Nevada Second Grade Attendance

	1993		1994	
Reading	Score	%tile	Score	%tile
Attended NV 2nd grade	627	16	637	20
Attended other 2nd grade	624	15	620	13
Could not determine	625	15	570	4
p	*.80*		*.08*	
Mathematics	Score	%tile	Score	%tile
Attended NV 2nd grade	638	22	639	22
Attended other 2nd grade	634	20	624	15
Could not determine	619	13	625	16
p	*.77*		*.08*	

Low SES Students

Finding: *In 1993 third grade rural and Washoe students who were eligible for free or reduced cost lunch scored higher in mathematics but lower in reading if they attended Nevada schools in second grade. There were no significant differences in 1994 in any districts (see Table 24).*

Table 24

Low SES Third Grade Scores by Nevada Second Grade Attendance

	1993		1994		Clark 1994	
Reading	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	661	35	661	35	651	27
Attended other 2nd grade	665	38	652	29		
Could not determine	638	21	643	23	655	30
p	*<.01**		*.10*		*.07*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	657	35	654	33	650	32
Attended other 2nd grade	653	32	646	27		
Could not determine	629	17	648	28	653	35
p	*.02**		*.11*		*.14*	

**This difference is significant*

Ethnicity

Finding: *White students tended to score higher in reading and mathematics if they attended second grade in Nevada schools. Other ethnic groups showed mixed results (see Table 25 through Table 29). In most cases second grade attendance did not affect scores. Some exceptions are Asian students in Clark in 1994 who had higher reading scores if they attended second grade in Nevada and Hispanic students in Clark who scored higher in both reading and mathematics if they had attended second grade in Nevada. Another exception is the finding that rural and Washoe American Indian students scored higher in reading in 1994 if they had attended second grade in Nevada. On the other hand, Black students in 1994 in all districts scored higher in reading if they had not attended second grade in Nevada.*

Table 25

American Indian/Alaska Native Third Grade Scores by Nevada Second Grade Attendance

Reading	1993 Score	1993 %tile	1994 Score	1994 %tile	Clark 1994 Score	Clark 1994 %tile
Attended NV 2nd grade	667	40	656	31	676	46
Attended other 2nd grade	664	38	599	8		
Could not determine			644	24	687	56
p	*.99*		*.01**		.34	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	659	37	648	28	664	45
Attended other 2nd grade	659	37	631	18		
Could not determine			666	43	669	51
p	*.98*		*.31*		*.69*	

**This difference is significant*

Table 26

Asian/Pacific Islander Third Grade Scores by Nevada Second Grade Attendance

Reading	1993 Score	1993 %tile	1994 Score	1994 %tile	Clark 1994 Score	Clark 1994 %tile
Attended NV 2nd grade	679	49	679	49	688	56
Attended other 2nd grade	691	60	678	48		
Could not determine	642	23			676	48
p	*.10*		*.92*		<.01*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	682	56	680	55	687	68
Attended other 2nd grade	702	74	673	49		
Could not determine	658	36			679	63
p	*.18*		*.84*		.12	

**This difference is significant*

Table 27

Black Third Grade Scores by Nevada Second Grade Attendance

	1993		1994		Clark 1994	
Reading	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	666	39	661	35	641	22
Attended other 2nd grade	670	42	668	40		
Could not determine	566	3			654	29
p	*.07*		*<.01**		*<.01**	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	653	32	653	32	641	25
Attended other 2nd grade	649	29	646	27		
Could not determine	544	2			649	31
p	*.07*		*.29*		.06	

**This difference is significant*

Table 28

White Third Grade Scores by Nevada Second Grade Attendance

	1993		1994		Clark 1994	
Reading	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	685	54	687	56	682	51
Attended other 2nd grade	677	48	675	46		
Could not determine	656	31	664	38	679	49
p	*<.01**		*<.01**		.11	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	678	53	681	55	677	59
Attended other 2nd grade	668	45	670	47		
Could not determine	648	28	660	38	674	56
p	*<.01**		*<.01**		.05*	

**This difference is significant*

Table 29

Hispanic Third Grade Scores by Nevada Second Grade Attendance

Reading	1993 Score	1993 %tile	1994 Score	1994 %tile	Clark 1994 Score	Clark 1994 %tile
Attended NV 2nd grade	652	29	657	32	658	32
Attended other 2nd grade	648	26	652	29		
Could not determine	650	27	616	12	644	24
p	.92		.13		<.01*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	654	33	654	33	658	32
Attended other 2nd grade	637	21	655	34		
Could not determine	634	20	652	32	648	25
p	.06		.98		<.01*	

**This difference is significant*

Gender

Finding: *In 1993 females scored significantly higher in reading if they attended Nevada schools in second grade; males scored significantly higher in both reading and mathematics if they attended second grade in Nevada. In 1994 females scored significantly higher in both reading and mathematics if they had attended Nevada schools in second grade; males scored higher in both subjects, but not significantly so (see Tables 30 and 31).*

Table 30

Female Third Grade Scores by Nevada Second Grade Attendance

Reading	1993 Score	1993 %tile	1994 Score	1994 %tile	Clark 1994 Score	Clark 1994 %tile
Attended NV 2nd grade	681	51	683	53	673	43
Attended other 2nd grade	680	50	668	40		
Could not determine	662	36	651	28	670	41
p	*<.01**		*<.01**		*.02**	
Mathematics	1993	%tile	1994	%tile	Clark 1994	%tile
Attended NV 2nd grade	673	49	675	50	670	42
Attended other 2nd grade	670	47	662	40		
Could not determine	663	41	656	34	667	49
p	*.66*		*<.01**		*.02**	

**This difference is significant*

Table 31

Male Third Grade Scores by Nevada Second Grade Attendance

Reading	1993 Score	1993 %tile	1994 Score	1994 %tile	Clark 1994 Score	Clark 1994 %tile
Attended NV 2nd grade	677	48	678	48	671	42
Attended other 2nd grade	669	41	669	41		
Could not determine	641	22	659	33	669	40
p	*<.01**		*.20*		*.20*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
Attended NV 2nd grade	673	49	674	49	669	51
Attended other 2nd grade	665	42	670	47		
Could not determine	628	17	658	36	667	49
p	*<.01**		*.68*		*.31*	

**This difference is significant*

Question 7 Was there a difference between the gains from second grade to third grade and from second grade to fourth grade which were made by students in smaller second grade classrooms and gains which were made by the students in larger second grade classrooms?

In answering this question, the first longitudinal study of Nevada students was begun. The scores for student who could be identified by name (and by birthdate when necessary) were tracked for second, third, and fourth grades. The differences between their third and fourth grade scores and their second grade scores were averaged for students from smaller second grade classrooms and larger second grade classrooms.

Finding: *Rural and Washoe students from larger classrooms made larger gains in mathematics scores by the third grade than did the students from the smaller classrooms. Reading score gains were inconclusive. (see Table 32).*

The effect of class size on gains by each of these groups was the opposite of the effect of class size on the second grade scores. That is, while second grade reading scores were lower for students in smaller classrooms, the gains between second and third grades were somewhat larger. Conversely, while the second grade mathematics scores were higher for students in smaller classrooms, the gains between second and third grades were smaller (significantly smaller in 1994).

Clark County differences follow the same trend but the gains are lower. Since the tests were for different times of the year they should not be compared with the rural and Washoe results, but only with each other. The 1993 results were a small sample of the Clark County school district.

Table 32

Third Grade Gains of Students by Second Grade Class Size

Reading Gains	1992-93	1993-94	Clark 1993-94
1-15 students	27	38	15
Over 15 students	20	38	9
p	*.14*	*.81*	*.24*
Mathematics	1992-93	1993-94	Clark 1993-94
1-15 students	52	51	21
Over 15 students	57	56	26
p	*.06*	*<.01**	*.29*

**This difference is significant*

Gains from the second grade through the fourth grade (from 1992 through 1994) were compared for rural and Washoe students. These gains were not significant.

Table 33

Fourth Grade Gains of Students by Second Grade Class Size

Reading Gains	1992-94
1-15 students	37
Over 15 students	32
p	*.32*
Mathematics	1992-94
1-15 students	18
Over 15 students	19
p	*.51*

The actual scores of these students were examined over the two-year period.

Finding: ***The mathematics and reading scores were higher for third graders who attended second grade in large classrooms than for those who attended second grade in small classrooms (see Table 34).***

Table 34

Third Grade Scores by Second Grade Class Size

Reading	1993 Score	1993 %tile	1994 Score	1994 %tile	Clark 1994 Score	Clark 1994 %tile
1-15 students	679	49	681	51	677	47
Over 15 students	685	54	688	57	675	45
p	*<.01**		*<.01**		*.75*	
Mathematics	Score	%tile	Score	%tile	Score	%tile
1-15 students	673	49	676	51	672	54
Over 15 students	678	53	682	56	672	54
p	*>.01**		*<.01**		*.96*	

*This difference is significant

Conclusions

The Class Size Reduction Act has been successful in reducing the student teacher ratio within Nevada's second grade classrooms. For approximately 34% of second grade students this ratio has been reduced through team teaching.

The effect of these lower student-teacher ratios is mixed. Second grade reading scores tended to be lower in smaller (1-15 students) classrooms than in larger (over 15 students) while mathematics scores tended to be higher in smaller classrooms.

A primary purpose for reducing the student teacher ratio in early grades is to make students more successful in their education in later years. This purpose seems to be realized in the short term. When looking at third grade students who had attended Nevada schools in the second grade versus students who did not, the graduates of the State's second grades scored significantly higher in both reading and mathematics. However, whether there will be long-term effects, it is not possible to say at this time. This will require more study in the future.

A gains analysis comparing test score gains for the same students as they moved from second to third to fourth grade did not show significant differences by the class size ratio experienced in second grade with the exception of gains in mathematics by rural and Washoe students in larger classes. However, there was a tendency for greater gains in mathematics to be associated with larger second grade classrooms and greater gains in reading to be associated with smaller second grade classrooms.

As in the previous evaluation (Snow, 1993), this evaluation found that there are several factors overwhelmingly more important than class size in predicting a student's CTBS/4 score. Special education status, ESL status, ethnicity, free lunch eligibility and class configuration each (in order) accounted for more variance in test scores than did class size. At the same time, there is evidence that the numbers of special education students, ESL students, and students eligible for free or reduced lunch have increased in Nevada over the years this program has been in effect.

While a portion of the differences between student scores can be explained by the class size and student characteristics, most (approximately 90%) of the differences are "unexplained" by the data. These differences reflect such factors as different teaching styles, maturity of students, family support, and other variables not included in this study.

Recommendations

1. *Fully fund the Class Size Reduction program for the grades it covers.* Currently districts are forced to choose in which schools the program is fully implemented at 15 to 1 and in which schools the ratio is higher. As full implementation is most often accomplished first in at-risk schools, this adversely affects the possibility of finding positive outcomes in an evaluation study of reduced class size.

2. *Fund programs which target preschool and early intervention programs for special populations (i.e., limited English proficient, single parent, disadvantaged, free school lunch).* Such programs are needed to address student characteristics which, as this study confirms, markedly account for more variance in student achievement than does class size reduction as currently implemented.

3. *Fully fund a comprehensive evaluation of Class Size Reduction.* There has not been a comprehensive evaluation of this program. Both the 1993 and 1995 evaluations of class size reduction have been limited to focusing primarily on examining results of student achievement as measured by nationally-normed standardized examinations. This existing evaluation design is not able to examine classroom behaviors, teacher/student/parent interactions, and other support information including disciplinary and special education referrals, and other selected population characteristics such as absenteeism, parental involvement, violence, etc.

4. *Develop a longitudinal evaluation design which relies on existing state mandated testing.* Continue to build on the existing studies by developing a longitudinal evaluation design which will examine: (1) those eighth grade students in 1998 who were exposed to reduced class sizes four years earlier, and (2) 4th grade testing results in 1998. This cost efficient design will rely on the student testing included as part of the state-mandated Nevada Proficiency Examination program which already requires testing at grades 4 and 8.

5. *Provide funding to include teacher and staff development.* Statewide funding which provides only salaries is not adequate. Resources should be provided to assure that pre-service training as well as in-service training is provided which *encompasses methods and techniques pertinent to reduced class sizes and use of student assessment information in such classrooms.*

6. *Collect educational and student test data electronically.* The development and implementation of a statewide automated individual student records system is crucial. This report highlights the need for longitudinal individual student tracking which is possibly only with the electronic collection of all individual student records by the state education agency. *This report supports the necessity of full funding and implementation of the Statewide Management of Automated Records Transfer (SMART) project.*

7. *Conduct all state mandated student testing at the same time throughout the state.* Currently, districts are provided the option of when during the year to test students at grades 4, 8, and 11. This district flexibility has proven to create undue difficulties in evaluating school programs. The full effects of a program are difficult to determine when second grade achievement is measured by some districts in the spring of the second grade year and in some districts in the fall of the third grade year. Data from these two groups must be analyzed separately rather than as one statewide cohort.

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REPORT PREPARED BY

TESTING AND EVALUATION DEPARTMENT

CLARK COUNTY SCHOOL DISTRICT

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INTRODUCTION

In response to legislation passed during the 1989-90 legislative session, the class-size reduction (CSR) program was implemented in Nevada in the fall of 1990. This program provides funding to reduce the student-teacher ratio to 15:1 in all Nevada first and second grades, as well as in designated kindergartens housing large numbers of at-risk students. The legislation also requires Nevada school districts to demonstrate the effectiveness of the smaller class sizes.

In compliance with this mandate, the Nevada Department of Education conducted a comprehensive evaluation of CSR in all 17 Nevada school districts. As part of this evaluation, all elementary school principals, all first- and second-grade teachers, and parents of students in CSR classrooms were surveyed to obtain their perceptions of the effectiveness of CSR (Table 1).

Principal Survey

The principal surveys were divided into three sections. In the first section, the principal was asked to indicate the grades housed in his/her school (Table 2) and the specific number of CSR classrooms by configuration at the kindergarten, first-, and second-grade levels (Table 3). These included self-contained single teacher classrooms, cooperative/team teaching classrooms, and/or other CSR configurations such as the pullout program. The first section also asked for the average number of students and teachers in the CSR classrooms as of November 1, 1993, and again as of May 1, 1994 (Table 4).

The second section of the survey asked principals to provide their opinions as to how CSR has affected 23 aspects of teaching and learning at their school. Response to these items was tallied on a scale of 0-5. A response of "0" meant "no opinion" or "don't know"; responses of "1" and "2" meant "great decline" and "some decline," respectively, in that area; a response of "3" indicated "no change"; and responses of "4" and "5" represented "some improvement/ increase" and "great improvement/increase," respectively, in the area. This report indicates the percent of principals statewide who chose each answer choice (Table 5) and the percent of principals who responded positively (answer choice 4 or 5) in each county (Table 6).

The third section of the survey contained three questions designed to elicit principals' observations on the most advantageous aspects of CSR, what aspect most interferes with the success of CSR, and what single change they felt would most improve its effectiveness. This report indicates the most common responses to these questions.

Teacher Survey

The teacher survey was very similar to the one for principals. The survey was also divided into three sections. The first section was designed to collect certain demographic information from the teachers (Tables 7-10), such as the type of CSR configuration to which the teacher is assigned and the number of students the teacher had in his/her classroom as of November 1, 1993, and again as of May 1, 1994. The first section also asked the number of years the teacher has taught at his/her present grade level, as well as the average class size in classes prior to CSR.

The second section of the questionnaire asked CSR teachers to assess the impact of CSR on 23 aspects of the teaching-learning situation. They were the same items found on the principal questionnaire, with one exception. Principals were asked about the amount of principal-parent contact relating to discipline problems, while the teachers were asked about their interaction with other teachers. This report indicates the percent of teachers statewide who chose each answer choice 1-5 (Table 11), and the percent who responded positively (answer choice 4 or 5) in each county (Tables 12 and 13).

The final section of the survey contained the same three questions regarding the most advantageous aspect of CSR, the aspect that most interferes with its successful implementation, and the single change teachers would make in CSR. Response to these items is reported in terms of the answers most commonly cited by the respondents.

Parent Survey

The design of the parent survey was somewhat different from that of the teacher and principal surveys. The parent survey was divided into two sections. In part of the first section the parents were asked to report demographic information about themselves. This included their awareness of the program, which grade their child was in, the type of CSR classroom (single or team taught), and the number of students in their child's class (Tables 14 and 15). One question was designed to elicit whether parents were positive, negative, or neutral about team teaching (Table 16). Other questions asked parents whether they felt the benefits of CSR warrant the additional cost of CSR (approximately $852 per student), and whether CSR should be extended to other grades. This report indicates the percentage of parents who chose each answer choice (Tables 17 and 18) and the grades other than first and second to which they would like to see CSR extended.

In the second section of the parent questionnaire, parents were asked to assess the impact of CSR on ten important aspects of the teaching-learning situation in relation to their child. Response to these items was tallied on a scale of 0-5. On this scale, a rating of "0" indicated the respondent had no opinion or did not know; a rating of "1" or "2" indicated that CSR had caused "great" or "some" decline, respectively, in how well their child did in a particular school-related area; a response of "3" meant "no change"; and a rating of "4" or "5" indicated CSR had brought about "some" or "great" improvement, respectively, in how well their child did in that area. This report indicates the percentage of parents of first graders and parents of second graders statewide who chose each answer choice for the items in this section (Table 19). Tables 20-22 show the percent by county of all parents combined who responded positively, neutrally, or negatively in each of the ten areas.

Parents were also asked if there were problems with CSR as it affected their child (Table 23), and what effect the reduced student-teacher ratio had had on their child. This report indicates the most frequent comments made by parents.

In addition to being included in the total parent results, the surveys of Spanish-speaking parents were tallied separately to determine if these parents had specific concerns. These results are shown in Table 24.

RESULTS

Of the 17 counties in Nevada, 14 participated in all three principal, teacher, and parent surveys. Esmeralda, Eureka and Lincoln counties did not participate in any of the CSR surveys, as their classes were small before the implementation of CSR. White Pine county had no responses returned from second-grade teachers.

SECTION 1: DEMOGRAPHIC DATA

Response to the demographic sections of the survey indicated the following:

Class-size reduction configuration and student-teacher ratio

Principal response

- Of 197 reported CSR kindergartens in the state, 98.0 percent were self-contained.

- Of 768 reported first-grade CSR classrooms in the state, principals reported 66.8 percent were self-contained, 27.5 percent were team-teaching situations, and 5.7 percent had another type of configuration such as flexible grouping or pullout programs. Principals reported that in the first-grade classrooms, the average student-teacher ratio both in November and in May was 16 to 1.

- Of 827 reported second-grade CSR classrooms in the state, principals reported that 69.2 percent were self-contained, 24.7 percent were team-teaching situations, and 6.1 percent had another type of configuration such as flexible grouping or pullout programs. Based on principals' reporting, in the second-grade classrooms the average student-teacher ratio was 16 to 1 in November, while in May it was 17 to 1.

Teacher response

- Of 891 first-grade teachers throughout the state who responded (or approximately 66.0 percent of the surveys mailed), 58.6 percent taught in self-contained classrooms, 36.8 percent taught in team-teaching situations, and 4.6 percent taught in other types of CSR configurations such as flexible grouping or pullout programs. In the self-contained first-grade classrooms, the average student -teacher ratio in November and May was 17 to 1, and in team-taught classes, the student-teacher ratio was 30 to 2 in November and in May.

- Of 913 second-grade teachers in the state who responded (or approximately 70.0 percent of the surveys mailed), 54.5 percent taught in self-contained classrooms, 40.3 percent taught in team-teaching situations, and 5.1 percent taught in other types of CSR configurations such as flexible grouping or pullout program s. In these second-grade classrooms, the average student-teacher ratio in both November and May was 18 to 1, and in team-taught classrooms, the average student-teacher ratio was 31 to 2 in November and 30 to 2 in May.

Parent response

Of 4,966 parents responding from the whole state, 69 percent of those with first graders reported their children were in self-contained classrooms with an average student-teacher ratio of 17 to 1, and 31 percent reported their first graders were in team-taught classes of 30 to 2. Sixty-five percent of the parents of second graders reported that their children were in self-contained classrooms of 17 to 1, and 35 percent reported their children were in team-taught classes with a student-teacher ratio of 30 to 2.

Elementary Grades Housed

Principal response

- 54.7 percent of all principal respondents reported they were principals of schools which house grades K-5.

- 28.2 percent of all principal respondents reported they were principals of schools which house grades K-6.

- The remaining 17.1 percent were principals of schools which house a different configuration of grade levels, such as K-2, K-8, or all grades K-12.

Teaching Experience

Teacher response

- The average number of years first-grade teachers reported they had taught was 10 years. Three teachers had taught for over 40 years.

  - 5.8 percent reported they were first-year teachers.
  - 51.2 percent reported they had taught 10 or more years.

- The average number of years first-grade teachers had taught at the first-grade level was 5 years.

  - 14.8 percent reported they had never taught first grade prior to 1993-94.
  - 17.3 percent reported they had taught first grade 10 or more years.

- The average number of years second-grade teachers had taught was 10 years.

  - 5.5 percent reported they were first-year teachers.
  - 42.6 percent reported they had taught 10 or more years.

- The average number of years second-grade teachers had taught at the second -grade level was 4 years.

  - 19.5 percent reported they had never taught second grade prior to 1993-94.
  - 13.2 percent reported they had taught second grade 10 or more years.

Parents' awareness of the CSR program

Parent response

- 53.8 percent of the first-grade and 57.8 percent of the second-grade parent respondents in the state reported that they were aware of the class-size reduction program prior to receipt of the survey.

- The remaining 46.2 percent of first-grade parents and 42.2 percent of the second -grade parents stated that they were not aware of the CSR program prior to receipt of the survey.

- Only 14.4 percent of Spanish-speaking parents indicated that they were aware of the program prior to receipt of the survey.

Parents who have had previous children go through first or second grade in regular-sized classes

Parent response

- Of the first-grade parents who responded, 47.2 percent had had one or more children in regular-sized first-grade classes. Of the second-grade parents, 60.2 percent said they had had one or more children in regular-sized second-grade classes.

- The remaining 52.8 percent of first-grade parent respondents and the remaining 39.8 percent of second-grade parent respondents had not had older children go through regular-sized first or second grades.

- Of Spanish-speaking parents, 45.1 percent had had a child or children in a regular-sized first or second grade.

Parents' response to the benefits of the CSR program

Parent response

Parents were asked whether they believed the benefits of CSR were great enough to warrant the additional cost of approximately $852 per student.

- 61.3 percent of the first-grade parents and 60.9 percent of the second-grade parents believed that the benefits are great enough to warrant the cost of $852 per student.

- 8.2 percent of first-grade parents and 9.4 percent of second-grade parents did not believe the benefits were worth the cost.

- 30.5 percent of the first-grade parents and 29.7 percent of the second-grade parents were unsure if the cost is warranted.

- Of the Spanish-speaking parents responding, 18.4 percent believed that the benefits are worth the additional cost, 9.2 percent did not think the benefits are worth the cost, and 72.4 percent indicated that they did not know.

Parents' response to extending CSR to other grades

Parent response

Parents responded to three questions asking: 1) whether CSR should be extended to other grades, 2) which grades they believe should be included in CSR, and 3) whether CSR should be extended even though extra classrooms may have to be built to accommodate the reduced student-teacher ratio.

- Of first-grade parent respondents, 75.4 percent reported they believed CSR should be extended. Of these, 49.1 percent felt that it should include kindergarten and/or third grade. 70.4 percent believed it should be extended even if it meant having to build new schools.

- Of second-grade parent respondents, 76.5 percent believed CSR should be extended. Of these, 48.5 percent felt that it should include kindergarten and/or third grade. 71.6 percent believed CSR should be extended even if it meant having to build new schools.

- Of Spanish-speaking parents responding, 32.8 percent believed CSR should be extended. Of these, 53.8 percent felt that it should include kindergarten and/or third grade.

Parents' reaction to team teaching

Parent response

- 50.5 percent of first-grade parents, 52.2 percent of second-grade parents, and 57.1 of Spanish-speaking parents responded positively to team teaching.

- 23.3 percent of first-grade parents, 20.0 percent of second-grade parents, and 20.6 of Spanish-speaking parents were neutral to the idea of team teaching.

- The remaining 26.2 percent of first-grade parents, 27.8 percent of second-grade parents, and 22.2 percent of Spanish-speaking parents stated a negative reaction to team teaching.

SECTION 2: OPINIONS OF CLASS-SIZE REDUCTION

Principal response

Response of principals throughout the entire state to the questions about the extent to which CSR has resulted in positive changes (answer choices 4 or 5) is shown below. To 18 of the 23 items, the percent of positive response was greater than that recorded in 1992. Principal response was as follows:

	Percent Positive Response
• student-teacher interaction	96.4
• monitoring student progress and providing feedback to students	97.6
• the amount of teachers' paperwork and recordkeeping*	71.4
• the number of discipline problems referred to your office*	79.5
• the pace of instruction	80.2
• the amount of time allocated to instructionally relevant activities	88.5
• student time-on-task	91.6
• student learning	93.3
• opportunities for your teachers to explore and use new/different teaching strategies	88.0
• cooperative activities among teachers	79.6
• principal-parent contacts regarding discipline problems*	64.6
• teacher-administrator interaction	55.1
• student morale	83.7
• teacher morale	87.9
• small-group instruction	94.6
• physical space	50.0
• use of hands-on activities and manipulative materials	92.1
• teacher planning and preparation	76.1
• social interaction among students	71.6
• social/personal interaction between teachers/students	89.7
• use/effectiveness of enrichment activities	89.1
• parent-teacher contacts	76.5
• one-to-one instruction	95.2

* These three questions are considered flawed. Some principals chose answer choice 1 or 2 to indicate that teachers' paperwork and the number of discipline problems/parent contacts declined, while others chose 4 or 5 to indicate paperwork and discipline problems have improved (but not increased). Therefore a positive response for these two questions is the total of numbers 1, 2, 4 and 5.

Teacher response

The responses of first- and second-grade teachers from the entire state to the questions about the extent to which CSR has resulted in positive (answer choices 4 or 5) changes are reported below. First-grade teachers responded more positively than in 1992 to 18 of the 23 questions, while second-grade teachers responded more positively to 21 of the 23 questions. Teacher response was as follows:

	Percent Positive Response	
	1st Grade	2nd Grade
• student-teacher interaction	93.1	92.0
• monitoring student progress and providing feedback to students	94.2	93.7
• the amount of paperwork and recordkeeping*	78.3	76.9
• the number of discipline problems*	75.7	74.6
• the pace of instruction	78.2	74.7
• the amount of time allocated to instructionally relevant activities	82.0	78.5
• student time-on-task	83.2	82.3
• student learning	89.4	88.6
• opportunities for you to explore and use new/different teaching strategies	92.8	88.5
• cooperative activities among teachers	74.1	75.8
• your interaction with other teachers	62.5	65.2
• teacher-administrator interaction	40.1	40.9
• student morale	83.5	80.3
• teacher morale	86.8	82.8
• small-group instruction	91.1	91.3
• physical space	59.6	56.3
• use of hands-on activities and manipulative materials	82.1	83.1
• teacher planning and preparation	65.6	65.0
• social interactions among your students	78.9	74.8
• social/personal interaction between teachers and students	87.0	84.3
• use and effectiveness of enrichment activities	86.9	85.1
• parent-teacher contacts	72.3	64.5
• one-to-one instruction	92.2	90.8

* These two questions are considered flawed. Some teachers chose answer choice 1 or 2 to indicate that paperwork and the number of discipline problems declined, while others chose 4 or 5 to indicate paperwork and discipline problems have improved (but not increased). Therefore a positive response for these two questions is the total of numbers 1, 2, 4 and 5.

Parent response

Parents also were asked to assess a number of factors related to how class-size reduction had affected their child's education. The percentage of parents from the whole state who believed that class-size reduction had brought about some improvement (answer choice 4 or 5) is shown on the following page.

	Percent Positive Response		
How do you feel CSR has affected:	**1st-Grade Parents**	**2nd-Grade Parents**	**Spanish-Speaking Parents**
• your child's learning to read?	85.3	79.9	79.7
• your child's learning mathematics?	83.8	78.5	79.2
• your child's learning to talk and express him/herself?	76.8	72.5	74.3
• your child's learning to write?	82.3	77.3	75.1
• your child's grades in school?	79.1	74.6	77.9
• how well your child likes and gets involved in school?	76.7	70.9	74.6
• how well your child gets along with playmates?	69.2	62.8	74.7
• your child's interest in reading and other school work?	78.1	74.4	78.0
• your involvement with the school?	47.5	43.9	60.8
• the contacts you've had with the teachers?	61.6	57.1	65.6

SECTION 3: ADVANTAGES/DISADVANTAGES OF CLASS-SIZE REDUCTION

Principals and teachers were asked to comment on three questions regarding their opinion of the class-size reduction program. Shown below is (are) the most frequent response (responses) to each open-ended question. Not all principals and teachers answered all three questions.

Principal response

Percentages given are based on 481 principal surveys that were received.

	% of all Principals
Q: In your opinion, what is the most advantageous aspect of CSR?	
• more one-to-one and quality small-group instruction	56.9
Q: In your opinion, what aspect of CSR most interferes with its successful implementation?	
• the lack of enough classrooms for each teacher to have a self-contained room, or classrooms too small for team teaching	47.5
Q: In your opinion, what single change in CSR would most improve its effectiveness?	
• Provide enough rooms for each teacher to have his/her own classroom.	32.0

Teacher response

Teachers were asked to give their opinion on the same three questions as the principals. Following are their comments on each question, based on the survey results of 1,804 teachers.

	% of all Teachers
Q: In your opinion, what is the most advantageous aspect of CSR?	
• There is more individual attention and instruction.	41.8
• Teachers are better able to monitor students' progress and provide feedback.	8.2

Q: In your opinion, what aspect of CSR most interferes with its successful implementation?

- team teaching — 24.4
- the lack of space in team teaching classrooms, or the insufficient number of classrooms for each teacher to have his/her own classroom — 21.2

Q: In your opinion, what single change in CSR would most improve its effectiveness?

- Each teacher should have a self-contained classroom with the mandated ratio of 15 to 1. — 33.3

Parent response

Parents were also asked to comment about the effect of the CSR program on their child. The following are the most frequent responses to the open-ended questions. The percent is based on the 4,966 parent surveys received; however, not all parents responded to the open-ended questions.

	% of Parents
Q: In your opinion, what effect has the reduced student-teacher ratio had on your child?	
• CSR has resulted in increased individual attention and instruction.	24.9
• CSR has improved the learning of new skills and/or increased understanding.	7.1
• In CSR classes, the students are more confident and have higher self-esteem.	5.1
• CSR has had a positive effect on my child.	4.8
• There are fewer distractions and better class control in small classes.	2.9
Q: In your opinion, are there problems with the class-size reduction program as it affects your child?	
• There are no problems with CSR.	37.7
• The team teaching classes are too noisy and crowded, and/or the teachers are not compatible.	4.4
• The state mandated 15 to 1, but there are more than that in my child's class.	1.0
• It is hard for students to adapt to large third-grade classes with one teacher after being in small classes or having had two teachers.	0.3

Additional comments or thoughts:

• Extend CSR to other grades (varying configurations of K-12 suggested).	2.7
• I like the idea of team teachers.	2.2
• CSR benefits students in the early grades because this is when they learn the basics, which will help them all through their school years.	1.6
• There are other ways to save money that are as effective as CSR (varying suggestions, including the use of teacher aides, year-round schools, raising the limit to 20 to 1, or building two story schools).	1.4
• CSR is a great program.	1.1

SUMMARY

Principal response to CSR is very positive regarding the extent to which CSR has brought about changes in schools. Over one half of the principals responded positively to every question. They were unanimous in their opinion that positive change was most obvious in student-teacher interaction, in monitoring students' progress and providing feedback to students, and in one-to-one instruction. They also felt that CSR provided for a high percentage of positive change in small group instruction, opportunities for teachers to explore and use different teaching strategies, and student learning.

The most frequent comment on the advantageous aspects of CSR is the high quality individual and small group instruction and attention. Principals believe that the single factor which could most improve CSR would be to have all self-contained classrooms of 15 to 1 or to have classrooms large enough to comfortably accommodate team teaching classes.

First- and second-grade teacher response to CSR is as positive as that of principals. On 22 of the 23 questions about CSR's effect in their classroom, at least 50 percent of all first- and second-grade teachers responded positively to every question. As a whole group, they felt the most positive improvements were in the areas of monitoring student progress and providing feedback, student-teacher interaction, and small group and one-to-one instruction. Teachers noted little change in interaction with the administrator or with other teachers.

Over one third of the teachers commented that the most advantageous aspect of CSR is the teacher's ability to provide individual instruction to each student. The most frequently noted aspect of CSR that interferes with its success was that classrooms are not big enough to accommodate two teachers and 32 students and all their belongings. They said that giving each teacher his/her own classroom would improve CSR even further.

Parents with children in first- and second-grade CSR classes are also very positive about the program. Nearly three-fourths of all parent respondents answered positively to all ten questions concerning their child's improvement in grades and subject areas. They felt that the greatest improvements have been in reading and math. Less than one half indicated increased involvement with school since the CSR program went into effect, because many noted they had always been involved in their child's education.

One fourth of all parents commented that their child had received increased help and individual attention, and over one third wrote in that there haven't been any problems with the class-size reduction. The most frequent additional comment was to extend CSR to other grades besides first and second.

Table 1
Total Number of Surveys Sent and Returned

County and #	Principals			1st-Grade Teachers			2nd-Grade Teachers			Parents of 1st and 2nd Graders				
											Returned		Total	
	Sent	Total Ret.	% Ret.	Sent	Total Ret.	% Ret.	Sent	Total Ret.	% Ret.	Sent	Span.	Eng.	Ret.	% Ret.
01 Carson	6	6	100%	45	32	71%	36	32	89%	NA	35	421	456	NA
02 Churchill	5	5	100%	23	21	91%	21	16	76%	704	1	323	324	46%
03 Clark	121	99	82%	824	553	67%	814	565	69%	3848	43	920	963	25%
04 Douglas	5	5	100%	34	18	53%	32	26	81%	1066	9	325	334	31%
05 Elko	10	10	100%	60	47	78%	61	45	74%	1260	57	699	756	60%
06 Esmeralda	←						Not Participating							→
07 Eureka	←						Not Participating							→
08 Humboldt	7	5	71%	21	16	76%	20	13	65%	NA	44	320	364	NA
09 Lander	1	1	100%	7	7	100%	7	7	100%	218	0	88	88	40%
10 Lincoln	←						Not Participating							→
11 Lyon	6	4	67%	35	20	57%	38	29	76%	890	5	390	395	44%
12 Mineral	2	2	100%	6	6	100%	5	5	100%	NA	0	59	59	NA
13 Nye	9	6	67%	20	17	85%	20	16	80%	NA	7	374	381	NA
14 Pershing	1	1	100%	5	5	100%	5	5	100%	141	7	57	64	45%
15 Storey	1	1	100%	2	1	50%	2	1	50%	59	0	28	28	47%
16 Washoe	50	34	68%	255	143	56%	241	153	63%	1914	0	613	613	32%
17 White Pine	3	2	67%	10	5	50%	6	0	0%	NA	1	140	141	NA
Total	227	181	80%	1347	891	66%	1308	913	70%	NA	209	4757	4966	NA

NA = not available

Table 2
Grades Housed
Principal Response

County and #	K-2	K-3	K-5	K-6	K-8	K-12	Other or Missing
01 Carson	--	--	6	--	--	--	--
02 Churchill	--	--	--	5	--	--	--
03 Clark	5	12	81	--	--	--	1
04 Douglas	--	--	--	4	--	--	1
05 Elko	--	--	1	6	--	3	--
06 Esmeralda	Not Participating						
07 Eureka	Not Participating						
08 Humboldt	--	--	3	--	--	2	--
09 Lander	--	--	1	--	--	--	--
10 Lincoln	Not Participating						
11 Lyon	--	--	--	2	--	--	2
12 Mineral	--	--	--	--	2	--	--
13 Nye	--	--	1	4	--	--	1
14 Pershing	--	--	1	--	--	--	--
15 Storey	--	--	1	--	--	--	--
16 Washoe	--	--	2	30	1	--	1
17 White Pine	--	--	2	--	--	--	--
Total	5	12	99	51	3	5	6

Table 3
Principal Response
Total Number of CSR Configurations

County and #	Kindergarten			First Grade			Second Grade		
	S.C.	T.T.	O.	S.C.	T.T.	O.	S.C.	T.T.	O.
01 Carson	9	0	0	16	9	0	9	13	0
02 Churchill	17	0	0	30	0	0	30	0	0
03 Clark	67	0	1	301	134	33	370	129	36
04 Douglas	8	0	0	8	13	0	5	14	1
05 Elko	29	0	0	20	16	0	22	13	0
06 Esmeralda	Not Participating								
07 Eureka	Not Participating								
08 Humboldt	2	0	0	17	1	0	21	0	0
09 Lander	9	0	0	7	0	0	7	0	0
10 Lincoln	Not Participating								
11 Lyon	4	0	0	6	0	1	8	0	0
12 Mineral	1	0	0	5	0	1	4	1	1
13 Nye	4	0	1	4	2	0	4	2	0
14 Pershing	3	0	0	5	0	0	5	0	0
15 Storey	1	0	0	1	0	0	1	0	0
16 Washoe	31	2	0	85	36	9	81	32	12
17 White Pine	8	0	0	8	0	0	6	0	0
Total State	193	2	2	513	211	44	573	204	50

S.C. = self-contained
T.T. = team teaching
O. = other configuration

Table 4
Average Student-Teacher Ratio in
November and May
Based on Principal Response

County and #	Kindergarten		First Grade		Second Grade	
	Nov.	May	Nov.	May	Nov.	May
01 Carson*	40/1	39/1	15/1	14/1	15/1	15/1
02 Churchill	25/1	26/1	16/1	15/1	16/1	15/1
03 Clark	27/1	28/1	16/1	17/1	16/1	17/1
04 Douglas	26/1	27/1	16/1	16/1	16/1	16/1
05 Elko	28/1	27/1	15/1	15/1	15/1	16/1
06 Esmeralda			Not Participating			
07 Eureka			Not Participating			
08 Humboldt	26/1	26/1	18/1	15/1	17/1	16/1
09 Lander	21/1	20/1	16/1	18/1	15/1	15/1
10 Lincoln			Not Participating			
11 Lyon	29/1	29/1	23/1	23/1	19/1	19/1
12 Mineral	15/1	14/1	17/1	16/1	19/1	18/1
13 Nye	18/1	18/1	15/1	15/1	20/1	20/1
14 Pershing	25/1	23/1	14/1	14/1	14/1	14/1
15 Storey	NR	NR	NR	NR	18/1	20/1
16 Washoe	25/1	24/1	15/1	15/1	16/1	16/1
17 White Pine	21/1	21/1	15/1	15/1	17/1	17/1
Total State**	27/1	28/1	16/1	16/1	16/1	17/1

* May include 2 sessions with one teacher

** State totals take into account response from each individual principal; they are <u>not</u> an average of the county-by-county totals.

NR = no response

Table 5
Principal Response
Changes Attributable to CSR
State Totals

To what extent has CSR resulted in changes in:	Percent Response				
	1	2	3	4	5
• student-teacher interaction?	0.0	0.6	3.0	41.2	55.2
• monitoring progress/providing feedback?	0.0	0.6	1.8	39.8	57.8
• paperwork and recordkeeping?	9.9	22.4	28.6	21.1	18.0
• discipline problems referred to office?	19.2	23.7	20.5	21.2	15.4
• pace of instruction?	0.0	1.9	17.9	58.0	22.2
• time for instructionally relevant activities?	0.0	0.0	11.5	49.1	39.4
• student time-on-task?	0.0	0.0	8.4	50.0	41.6
• student learning?	0.0	0.0	6.6	57.8	35.5
• exploring new/different teaching strategies?	0.0	1.2	10.8	46.1	41.9
• cooperative activities among teachers?	0.6	1.2	18.7	38.6	41.0
• principal-parent contacts on discipline?	15.2	17.7	35.4	17.1	14.6
• teacher-administrator interaction?	0.6	1.8	42.4	40.6	14.5
• student morale?	0.0	0.0	16.4	49.7	34.0
• teacher morale?	3.0	1.2	7.9	38.2	49.7
• small-group instruction?	0.0	0.6	4.8	39.4	55.2
• physical space?	14.4	21.2	14.4	17.5	32.5
• use of hands-on activities and manipulative materials?	0.0	0.0	7.9	49.7	42.4
• teacher planning and preparation?	0.0	0.0	23.9	40.5	35.6
• social interaction among students?	0.0	1.2	27.2	45.7	25.9
• social/personal interaction between teachers/students?	0.0	0.0	10.3	50.3	39.4
• use/effectiveness of enrichment activities?	0.0	0.0	10.8	55.4	33.7
• parent-teacher contacts?	0.0	0.0	23.5	45.2	31.3
• one-to-one instruction?	0.6	0.0	4.2	50.6	44.6

1 = great decrease/decline
2 = some decrease/decline
3 = no change
4 = some increase/improvement
5 = great increase/improvement

Table 6
Principal Response
Positive Change Attributable to CSR by County

County # →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
• student-teacher interaction	100	100	96	NA	100	NP	NP	100	100	NP	100	100	100	100	100	94	100
• monitoring progress/providing feedback	100	100	98	NA	100	NP	NP	100	100	NP	100	100	100	100	100	94	100
• paperwork and recordkeeping*	50	80	76	NA	67	NP	NP	20	NC	NP	100	50	75	100	NC	69	100
• discipline problems referred to office*	83	100	81	NA	78	NP	NP	60	100	NP	75	50	100	100	NA	72	100
• pace of instruction	83	80	90	NA	56	NP	NP	40	NC	NP	100	50	100	100	100	61	100
• time for instructionally relevant activities	100	100	94	NA	78	NP	NP	60	NC	NP	100	100	100	100	100	75	100
• student time-on-task	100	100	93	NA	70	NP	NP	100	NC	NP	100	100	100	100	100	88	100
• student learning	100	100	97	NA	70	NP	NP	80	100	NP	100	100	100	100	100	88	100
• exploring new/different teaching strategies	100	100	95	NA	80	NP	NP	20	NC	NP	100	100	100	100	100	76	100
• cooperative activities among teachers	100	100	88	NA	56	NP	NP	NC	100	NP	100	50	75	NC	100	76	50
• principal-parent contacts on discipline*	60	100	75	NA	33	NP	NP	40	NC	NP	75	50	66	NC	NC	50	50
• teacher-administrator interaction	67	40	71	NA	20	NP	NP	NC	NC	NP	100	50	25	NC	100	33	100
• student morale	100	100	91	NA	67	NP	NP	60	NC	NP	75	100	60	100	100	68	100
• teacher morale	83	100	95	NA	78	NP	NP	60	NC	NP	75	100	100	100	100	76	100
• small-group instruction	100	100	96	NA	100	NP	NP	100	NC	NP	75	100	100	100	100	88	100
• physical space	100	100	48	NA	33	NP	NP	80	NC	NP	75	100	100	100	100	33	100
• use of hands-on activities and manipulative materials	100	100	96	NA	90	NP	NP	100	NC	NP	100	100	100	100	100	79	100
• teacher planning and preparation	67	100	79	NA	80	NP	NP	40	NC	NP	100	100	75	NC	100	69	100
• social interaction among students	83	60	78	NA	33	NP	NP	40	100	NP	75	50	100	100	100	61	100
• social/personal interaction between teachers/students	100	100	93	NA	90	NP	NP	60	NC	NP	75	50	100	100	100	84	100
• use/effectiveness of enrichment activities	100	100	93	NA	80	NP	NP	100	NC	NP	75	100	100	100	100	76	100
• parent-teacher contacts	100	100	87	NA	50	NP	NP	0	100	NP	75	50	50	100	NC	64	100
• one-to-one instruction	100	100	97	NA	90	NP	NP	100	NC	NP	100	100	100	100	100	88	100

NA = not available NC = no change NP = not participating

* Includes principals who indicated a decrease or an improvement

Table 7
Average Number of Years Taught
Teacher Response

County and #	First-Grade Teachers		Second-Grade Teachers	
	Yrs. Taught	Yrs. Taught 1st Grade	Yrs. Taught	Yrs. Taught 2nd Grade
01 Carson	11	7	9	4
02 Churchill	13	8	9	3
03 Clark	9	5	10	4
04 Douglas	9	5	8	4
05 Elko	8	NA	10	NA
06 Esmeralda	Not Participating			
07 Eureka	Not Participating			
08 Humboldt	9	6	8	5
09 Lander	16	12	8	3
10 Lincoln	Not Participating			
11 Lyon	9	5	10	3
12 Mineral	17	8	16	7
13 Nye	11	7	10	7
14 Pershing	15	11	5	5
15 Storey	17	9	4	4
16 Washoe	11	6	12	5
17 White Pine	8	4	NA	NA
Total State*	10	5	10	4

* State totals take into account response from each individual teacher; they are <u>not</u> an average of the county-by-county totals.

NA = not available

Table 8
Types of First-Grade CSR Configurations and Average Student-Teacher Ratio in November and May Based on Teacher Response

County and #	Types of First-Grade CSR Configurations			Average Student-Teacher Ratio			
				S. C.		T. T.	
	S. C.	T. T.	O.	Nov.	May	Nov.	May
01 Carson	14	17	1	16/1	16/1	29/2	28/2
02 Churchill	21	0	0	16/1	16/1	---	---
03 Clark	317	209	27	18/1	18/1	31/2	31/2
04 Douglas	5	13	0	21/1	21/1	32/2	32/2
05 Elko	17	24	4	17/1	17/1	29/2	28/2
06 Esmeralda	Not Participating						
07 Eureka	Not Participating						
08 Humboldt	15	0	1	17/1	17/1	---	---
09 Lander	7	0	0	16/1	15/1	---	---
10 Lincoln	Not Participating						
11 Lyon	19	0	1	18/1	19/1	---	---
12 Mineral	5	0	1	18/1	17/1	---	---
13 Nye	16	0	1	17/1	16/1	---	---
14 Pershing	5	0	0	14/1	14/1	---	---
15 Storey	1	0	0	12/1	12/1	---	---
16 Washoe	74	64	5	18/1	18/1	29/2	29/2
17 White Pine	5	0	0	16/1	16/1	---	---
Total State*	521	327	41	17/1	17/1	30/2	30/2

* State totals take into account response from each individual teacher; they are <u>not</u> an average of the county-by-county totals.

S. C. = self-contained
T. T. = team teaching
O. = other configuration

Table 9
Types of Second-Grade CSR Configurations and Average Student-Teacher Ratio in November and May Based on Teacher Response

County and #	Types of Second-Grade CSR Configurations			Average Student-Teacher Ratio			
				S. C.		T. T.	
	S. C.	T. T.	O.	Nov.	May	Nov.	May
01 Carson	9	23	0	17/1	17/1	30/2	29/2
02 Churchill	15	0	1	16/1	16/1	---	---
03 Clark	315	227	23	18/1	18/1	31/2	31/2
04 Douglas	6	18	2	20/1	20/1	32/2	31/2
05 Elko	15	23	7	19/1	18/1	28/2	28/2
06 Esmeralda	Not Participating						
07 Eureka	Not Participating						
08 Humboldt	11	2	0	16/1	16/1	27/2	26/2
09 Lander	7	0	0	16/1	16/1	---	---
10 Lincoln	Not Participating						
11 Lyon	20	6	3	16/1	17/1	29/2	28/2
12 Mineral	3	2	0	18/1	18/1	28/2	26/2
13 Nye	14	1	1	19/1	19/1	NA	NA
14 Pershing	5	0	0	14/1	14/1	---	---
15 Storey	1	0	0	18/1	19/1	---	---
16 Washoe	77	66	10	18/1	17/1	30/2	30/2
17 White Pine	NR	NR	NR	NR	NR	NR	NR
Total State*	498	368	47	18/1	18/1	31/2	30/2

* State totals take into account response from each individual teacher; they are <u>not</u> an average of the county-by-county totals.

NA = not available
NR = no response
S. C. = self-contained
T. T. = team teaching
O. = other configuration

Table 10
Average Previous Class Size
Teacher Response

County and #	First Grade	Second Grade
01 Carson	24	26
02 Churchill	24	25
03 Clark	26	26
04 Douglas	26	24
05 Elko	23	26
06 Esmeralda	NP	NP
07 Eureka	NP	NP
08 Humboldt	21	23
09 Lander	25	20
10 Lincoln	NP	NP
11 Lyon	19	21
12 Mineral	25	24
13 Nye	20	21
14 Pershing	22	18
15 Storey	25	17
16 Washoe	24	25
17 White Pine	21	NR
Total State*	24	25

* State totals take into account response from each individual teacher; they are <u>not</u> an average of the county-by-county totals.

NR = no response
NP = not participating

Table 11
Teacher Response
Changes Attributable to CSR
State Totals

To what extent has CSR resulted in changes in:	First-Grade Teachers					Second-Grade Teachers				
	1	2	3	4	5	1	2	3	4	5
	%	%	%	%	%	%	%	%	%	%
• student-teacher interaction	0.7	1.3	4.9	25.7	67.4	0.2	1.7	6.0	33.1	58.9
• monitoring progress/providing feedback	0.6	1.5	3.7	22.7	71.5	0.3	1.9	4.1	25.9	67.8
• paperwork and recordkeeping	13.2	21.8	21.8	18.5	24.8	12.0	20.5	23.1	18.0	26.4
• discipline problems	18.6	18.8	24.2	21.6	16.7	17.2	21.6	25.4	20.2	15.6
• pace of instruction	0.7	3.5	17.6	47.2	31.0	0.6	2.9	21.8	46.2	28.5
• time for instructionally relevant activities	0.9	2.5	14.7	40.6	41.4	0.3	1.7	19.4	41.9	36.6
• student time-on-task	0.6	2.2	14.0	41.0	42.2	0.2	3.0	14.5	44.4	37.9
• student learning	0.0	2.1	8.5	38.2	51.2	0.3	1.9	9.2	41.1	47.5
• exploring new/different teaching strategies	0.8	1.0	5.3	35.7	57.1	1.0	1.8	8.7	35.1	53.4
• cooperative activities among teachers	0.7	1.6	23.6	40.5	33.6	0.7	1.7	21.7	38.0	37.8
• interaction with other teachers	0.5	2.6	34.4	38.0	24.5	1.0	1.7	32.0	37.3	27.9
• teacher-administrator interaction	0.5	2.9	56.5	26.7	13.4	0.7	2.3	56.0	25.2	15.7
• student morale	0.4	1.6	14.6	37.5	46.0	0.6	1.6	17.6	37.9	42.4
• teacher morale	1.6	2.9	8.7	27.7	59.1	2.2	3.2	11.9	28.5	54.3
• small-group instruction	1.0	1.6	6.2	27.2	63.9	0.5	2.0	6.2	28.3	63.0
• physical space	17.0	11.3	11.3	12.6	47.0	20.2	12.3	11.2	12.3	44.0
• use of hands-on activities and manipulative materials	1.2	3.2	13.5	29.2	52.9	1.7	2.8	12.4	32.7	50.4
• teacher planning and preparation	0.9	4.6	28.8	34.1	31.5	1.3	4.1	29.6	31.8	33.2
• social interaction among students	0.2	2.8	18.1	41.4	37.5	0.2	2.2	22.8	38.6	36.2
• social/personal interaction between teachers/students	0.6	1.8	10.5	32.9	54.1	0.2	2.6	12.9	34.2	50.1
• use/effectiveness of enrichment activities	0.7	2.3	10.1	40.3	46.6	0.6	2.1	12.3	43.3	41.8
• parent-teacher contacts	0.6	1.8	25.4	40.3	32.0	0.6	1.7	33.2	35.9	28.6
• one-to-one instruction	1.1	2.4	4.2	35.0	57.2	0.8	1.8	6.6	35.7	55.1

1 = great decrease/decline
2 = some decrease/decline
3 = no change
4 = some increase/improvement
5 = great increase/improvement

Table 12
First-Grade Teacher Response
Positive Change Attributable to CSR by County

County # →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
• student-teacher interaction	97	100	92	88	91	NP	NP	88	86	NP	90	100	94	100	100	96	100
• monitoring progress/providing feedback	100	100	93	94	96	NP	NP	100	86	NP	95	83	88	100	100	96	100
• paperwork and recordkeeping*	68	90	80	63	86	NP	NP	63	71	NP	84	83	60	80	100	76	80
• discipline problems*	77	90	77	59	70	NP	NP	50	71	NP	89	83	81	60	100	75	80
• pace of instruction	74	76	81	65	51	NP	NP	75	86	NP	90	83	88	100	100	73	80
• time for instructionally relevant activities	84	86	83	59	69	NP	NP	69	100	NP	95	100	81	100	100	80	100
• student time-on-task	94	90	83	76	73	NP	NP	63	86	NP	95	100	88	100	100	83	80
• student learning	93	95	89	82	81	NP	NP	75	86	NP	95	100	94	100	100	92	80
• exploring new/different teaching strategies	94	100	93	100	87	NP	NP	100	57	NP	95	100	94	100	100	92	80
• cooperative activities among teachers	60	67	77	89	76	NP	NP	56	43	NP	80	67	81	100	100	65	80
• interaction with other teachers	52	52	67	59	54	NP	NP	19	71	NP	70	50	69	60	100	57	40
• teacher-administrator interaction	33	50	44	25	34	NP	NP	19	14	NP	55	50	35	80	NC	31	40
• student morale	97	95	82	81	72	NP	NP	69	71	NP	95	67	88	100	100	86	80
• teacher morale	90	95	87	82	72	NP	NP	81	86	NP	95	100	94	100	100	86	80
• small-group instruction	100	86	91	94	84	NP	NP	94	71	NP	95	100	94	100	100	92	80
• physical space	50	95	59	28	39	NP	NP	56	83	NP	90	83	81	100	100	58	80
• use of hands-on activities and manipulative materials	81	90	82	65	71	NP	NP	75	86	NP	95	100	75	100	100	81	100
• teacher planning and preparation	74	57	67	72	22	NP	NP	56	29	NP	65	67	75	80	100	61	80
• social interaction among students	77	86	78	59	70	NP	NP	88	71	NP	90	83	94	100	100	82	60
• social/personal interaction between teachers/students	94	90	86	61	84	NP	NP	94	71	NP	95	100	94	100	100	89	100
• use/effectiveness of enrichment activities	96	95	87	88	65	NP	NP	88	86	NP	95	100	94	100	100	86	80
• parent-teacher contacts	65	76	73	69	58	NP	NP	48	86	NP	85	67	75	40	NC	76	60
• one-to-one instruction	94	95	92	82	96	NP	NP	88	86	NP	95	100	94	100	100	91	100

NC = no change NP = not participating

*Includes teachers who indicated a decrease or an improvement

Table 13
Second-Grade Teacher Response
Positive Change Attributable to CSR by County

County # →	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
• student-teacher interaction	94	100	91	88	88	NP	NP	92	100	NP	96	80	93	100	100	94	NR
• monitoring progress/providing feedback	94	100	93	96	93	NP	NP	92	100	NP	96	80	93	100	100	95	NR
• paperwork and recordkeeping*	77	78	75	74	45	NP	NP	83	57	NP	88	60	86	100	100	81	NR
• discipline problems*	66	67	76	68	67	NP	NP	67	71	NP	85	40	71	60	100	75	NR
• pace of instruction	66	75	77	52	69	NP	NP	83	86	NP	79	80	75	100	100	74	NR
• time for instructionally relevant activities	76	81	81	64	64	NP	NP	83	86	NP	86	60	69	100	100	75	NR
• student time-on-task	81	81	84	68	82	NP	NP	75	100	NP	82	60	85	100	100	77	NR
• student learning	93	100	88	80	86	NP	NP	83	100	NP	96	80	93	100	100	89	NR
• exploring new/different teaching strategies	94	94	89	80	78	NP	NP	92	100	NP	93	60	93	100	100	88	NR
• cooperative activities among teachers	80	67	80	68	62	NP	NP	67	86	NP	61	60	64	40	100	73	NR
• interaction with other teachers	48	67	70	56	48	NP	NP	58	71	NP	54	60	43	40	100	63	NR
• teacher-administrator interaction	30	36	46	25	23	NP	NP	18	29	NP	38	40	29	20	100	38	NR
• student morale	77	88	81	63	70	NP	NP	75	100	NP	89	80	93	40	100	80	NR
• teacher morale	90	94	82	83	67	NP	NP	92	100	NP	82	60	93	100	100	84	NR
• small-group instruction	90	100	92	88	86	NP	NP	67	100	NP	93	80	93	100	100	92	NR
• physical space	26	94	57	28	33	NP	NP	67	71	NP	82	60	93	100	100	55	NR
• use of hands-on activities and manipulative materials	77	100	84	72	68	NP	NP	83	100	NP	86	80	93	100	100	84	NR
• teacher planning and preparation	62	81	65	64	72	NP	NP	67	86	NP	64	40	57	80	100	63	NR
• social interaction among students	65	93	76	61	60	NP	NP	75	100	NP	79	60	86	40	100	77	NR
• social/personal interaction between teachers/students	90	94	85	60	80	NP	NP	92	100	NP	86	80	93	80	100	84	NR
• use/effectiveness of enrichment activities	81	94	87	71	74	NP	NP	83	100	NP	86	60	93	100	100	84	NR
• parent-teacher contacts	55	60	65	72	50	NP	NP	50	86	NP	86	60	93	60	100	63	NR
• one-to-one instruction	90	94	91	80	91	NP	NP	92	100	NP	93	40	86	100	100	93	NR

NR = no response NP = not participating

*Includes teachers who indicated a decrease or an improvement

Table 14
Parent Response
1) Awareness of CSR Program and
2) Children in Regular-Sized Classrooms

County and #	Percentage of Parents			
	Aware of CSR Prog.		Child in Reg.-Sized Classroom	
	Yes	No	Yes	No
01 Carson	63	37	49	51
02 Churchill	66	34	56	44
03 Clark	56	44	55	45
04 Douglas	61	39	45	55
05 Elko	54	46	53	47
06 Esmeralda	Not Participating			
07 Eureka	Not Participating			
08 Humboldt	52	48	52	48
09 Lander	43	57	63	37
10 Lincoln	Not Participating			
11 Lyon	54	46	59	41
12 Mineral	47	53	69	31
13 Nye	35	65	59	41
14 Pershing	59	41	66	34
15 Storey	57	43	54	46
16 Washoe	59	41	51	49
17 White Pine	71	29	57	43
Total State*	56	44	54	46

* State totals take into account response from each individual parent. They are <u>not</u> an average of the county-by-county totals.

Table 15
Parent Response
Percentage of Students in
Different Classroom Configurations

County and #	First-Grade Parents		Second-Grade Parents	
	S.C.	T.T.	S.C.	T.T.
01 Carson	47	53	34	66
02 Churchill	98	2	99	1
03 Clark	60	40	60	40
04 Douglas	34	66	20	80
05 Elko	55	45	57	43
06 Esmeralda	Not Participating			
07 Eureka	Not Participating			
08 Humboldt	88	12	80	20
09 Lander	100	0	100	0
10 Lincoln	Not Participating			
11 Lyon	91	9	83	17
12 Mineral	100	0	70	30
13 Nye	99	1	93	7
14 Pershing	97	3	100	0
15 Storey	100	0	100	0
16 Washoe	60	40	53	47
17 White Pine	98	2	100	0
Total State*	69	31	65	35

* State totals take into account response from each individual parent; they are <u>not</u> an average of the county-by-county totals.

S.C. = self-contained
T.T. = team teaching

Table 16
Parent Response
Reaction to Team Teaching

County and #	Percent of Parents		
	Positive	Negative	Neutral/ No Response
01 Carson	70	14	16
02 Churchill	26	47	27
03 Clark	54	25	21
04 Douglas	69	16	15
05 Elko	61	18	21
06 Esmeralda	Not Participating		
07 Eureka	Not Participating		
08 Humboldt	45	28	27
09 Lander	27	43	30
10 Lincoln	Not Participating		
11 Lyon	40	36	24
12 Mineral	37	39	24
13 Nye	42	33	25
14 Pershing	33	36	31
15 Storey	36	43	21
16 Washoe	55	27	18
17 White Pine	31	45	24
Total State*	52	27	21

* State totals take into account response from each individual parent; they are <u>not</u> an average of the county-by-county totals.

Table 17
Parent Response
Benefits versus Cost

County and #	Percent of Parents Answering		
	Yes	No	Don't Know/ No Response
01 Carson	59	11	30
02 Churchill	56	15	29
03 Clark	64	9	27
04 Douglas	64	12	24
05 Elko	55	8	37
06 Esmeralda	Not Participating		
07 Eureka	Not Participating		
08 Humboldt	56	7	37
09 Lander	56	8	36
10 Lincoln	Not Participating		
11 Lyon	60	7	33
12 Mineral	56	10	34
13 Nye	53	10	37
14 Pershing	55	9	36
15 Storey	78	4	18
16 Washoe	73	6	21
17 White Pine	65	14	21
Total State*	61	9	30

* State totals take into account response from each individual parent; they are not an average of the county-by-county totals.

Table 18
Parent Response
Extension of CSR to Other Grades

County and #	Percent of Parents Answering							
	Yes, Extend	To What Grades?						Yes, Build To Extend
		K	3rd	K & 3	Elem.	All	O	
01 Carson	70	3	18	37	9	10	23	63
02 Churchill	70	5	7	47	3	20	18	63
03 Clark	79	4	11	32	11	23	19	73
04 Douglas	78	3	11	35	7	10	34	66
05 Elko	68	4	12	43	16	10	15	62
06 Esmeralda	← Not Participating →							
07 Eureka	← Not Participating →							
08 Humboldt	66	7	16	34	10	13	20	58
09 Lander	68	5	8	38	16	15	18	64
10 Lincoln	← Not Participating →							
11 Lyon	75	3	12	30	6	23	26	69
12 Mineral	78	2	7	24	7	31	29	64
13 Nye	78	3	4	27	7	28	31	74
14 Pershing	63	0	17	33	0	24	26	48
15 Storey	89	0	16	28	12	28	16	75
16 Washoe	84	2	11	30	9	19	29	78
17 White Pine	73	5	6	24	5	20	40	72
Total State*	76	4	11	34	9	18	24	71

* State totals take into account response from each individual parent; they are <u>not</u> an average of the county-by-county totals.

K = extend CSR to kindergarten only
3rd = extend CSR to third grade only
K & 3 = extend CSR to kindergarten and third grades only
Elem. = extend CSR to all elementary grades
All = extend CSR to all grades
O = extend CSR to some other grades

Table 19
Parent Response
State Totals

How has CSR affected:	First-Grade Parents					Second-Grade Parents				
	1	2	3	4	5	1	2	3	4	5
	%	%	%	%	%	%	%	%	%	%
• your child's learning to read?	2.1	2.7	10.0	30.6	54.7	2.1	3.0	14.9	34.6	45.3
• your child's learning mathematics?	1.8	2.4	12.1	32.2	51.6	1.8	3.9	15.8	37.2	41.3
• your child's learning to talk and express him/herself?	1.7	2.2	19.4	30.9	45.9	2.0	3.0	22.5	33.9	38.6
• your child's learning to write?	1.2	3.0	13.5	33.8	48.5	2.1	2.9	17.7	38.2	39.1
• your child's grades in school?	1.7	3.0	16.2	31.5	47.6	2.1	3.9	19.4	34.0	40.6
• your child's liking of and involvement in school?	1.3	2.6	19.4	30.9	45.8	2.0	2.9	24.2	30.7	40.2
• your child's getting along with playmates?	1.3	1.9	27.7	30.5	38.7	1.7	2.6	32.9	32.6	30.2
• your child's interest in reading and other school work?	2.0	2.9	16.9	28.9	49.2	1.7	4.2	19.8	33.0	41.4
• your involvement with the school?	1.9	2.1	48.6	23.0	24.5	1.6	4.0	50.5	23.6	20.3
• contacts you've had with teachers?	1.6	2.7	34.2	24.5	37.1	1.9	3.2	37.7	24.7	32.4

1 = great decrease/decline
2 = some decrease/decline
3 = no change
4 = some increase/improvement
5 = great increase/improvement

Table 20
Parent Response
Positive Change Attributable to CSR by County

County # →	Percent Positive Response																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
How has CSR affected:																	
• your child's learning to read?	83	82	78	80	86	NP	NP	83	86	NP	84	67	81	85	95	84	85
• your child's learning mathematics?	82	80	78	81	83	NP	NP	83	80	NP	85	59	77	88	95	81	83
• your child's learning to talk and express him/herself?	77	73	74	76	74	NP	NP	77	75	NP	74	53	71	73	84	75	77
• your child's learning to write?	80	80	77	80	81	NP	NP	81	80	NP	81	62	79	79	95	80	51
• your child's grades in schools?	78	73	75	73	79	NP	NP	78	81	NP	77	64	74	80	88	77	76
• your child's liking of and involvement in school?	80	71	72	74	74	NP	NP	73	70	NP	76	56	74	71	89	73	75
• your child's getting along with playmates?	67	66	64	64	63	NP	NP	72	69	NP	69	59	67	70	84	66	69
• your child's interest in reading and other school work?	80	75	72	76	76	NP	NP	77	79	NP	76	70	77	81	95	76	76
• your involvement with the school?	44	40	49	38	46	NP	NP	43	46	NP	49	35	41	48	58	50	53
• contacts you've had with teachers?	60	58	59	59	59	NP	NP	59	58	NP	61	46	54	56	74	62	69

NP = not participating

Table 21
Parent Response
Negative Change Attributable to CSR by County

County # →	Percent Negative Response																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
How has CSR affected:																	
• your child's learning to read?	4	6	6	3	3	NP	NP	7	3	NP	6	21	5	2	0	5	7
• your child's learning mathematics?	5	5	6	4	3	NP	NP	5	6	NP	4	13	6	2	0	6	6
• your child's learning to talk and express him/herself?	4	3	5	3	3	NP	NP	6	5	NP	5	22	6	2	0	6	6
• your child's learning to write?	4	4	5	3	3	NP	NP	6	8	NP	5	12	4	4	0	6	19
• your child's grades in schools?	4	6	7	4	4	NP	NP	7	8	NP	5	12	7	0	0	5	8
• your child's liking of and involvement in school?	4	6	5	3	4	NP	NP	6	6	NP	6	12	4	6	0	4	7
• your child'sgetting along with playmates?	2	4	4	2	3	NP	NP	4	2	NP	4	9	4	6	0	5	6
• your child's interest in reading and other school work?	4	6	7	4	4	NP	NP	8	5	NP	7	18	5	2	0	6	8
• your involvement with the school?	5	5	4	6	3	NP	NP	7	5	NP	6	9	6	2	0	4	6
• contacts you've had with teachers?	4	4	5	7	3	NP	NP	3	2	NP	5	14	5	0	0	7	2

NP = not participating

Table 22
Parent Response
No Change or Improvement Attributable to CSR by County

County # →	Percent Neutral Response																
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
How has CSR affected:																	
• your child's learning to read?	13	12	16	17	11	NP	NP	10	11	NP	10	12	14	13	5	11	8
• your child's learning mathematics?	13	15	16	15	14	NP	NP	12	14	NP	11	28	17	10	5	13	11
• your child's learning to talk and express him/herself?	19	24	21	21	23	NP	NP	17	20	NP	21	25	23	25	16	19	17
• your child's learning to write?	16	16	18	17	16	NP	NP	13	12	NP	14	26	17	17	5	14	30
• your child's grades in schools?	18	21	18	23	17	NP	NP	15	11	NP	18	24	19	20	12	18	16
• your child'sliking of and involvement in school?	16	23	23	23	22	NP	NP	21	24	NP	18	32	22	23	11	23	18
• your child's getting along with playmates?	31	30	32	34	34	NP	NP	24	29	NP	27	32	29	24	16	29	25
• your child's interest in reading and other school work?	16	19	21	20	20	NP	NP	15	16	NP	17	12	18	17	5	18	16
• your involvement with the school?	51	55	47	56	51	NP	NP	50	49	NP	45	56	53	50	42	46	41
• contacts you've had with teachers?	36	38	36	34	38	NP	NP	38	40	NP	34	40	41	44	26	31	29

NP = not participating

Table 23
Parent Response
Problems with CSR

County and #	Percent of Parents Answering		
	Yes	No	No Comments
01 Carson	8	36	56
02 Churchill	6	40	54
03 Clark	12	35	53
04 Douglas	11	40	49
05 Elko	7	40	53
06 Esmeralda	Not Participating		
07 Eureka	Not Participating		
08 Humboldt	4	44	52
09 Lander	1	46	53
10 Lincoln	Not Participating		
11 Lyon	5	34	61
12 Mineral	10	36	54
13 Nye	6	37	57
14 Pershing	11	53	36
15 Storey	0	46	54
16 Washoe	14	35	51
17 White Pine	5	57	38
Total State*	8	38	54

* State totals take into account response from each individual parent; they are <u>not</u> an average of the county-by-county totals.

Table 24
SPANISH PARENT SURVEY RESULTS

- **Number of responses:**
  Spanish 209 (results also included in total parent response tables)
- **Grade in which child is currently enrolled:**
  first 106 second 86
  both 17
- **Aware of the CSR program prior to receiving survey:**
  yes 14% no 86%
- **Reaction to team teaching:**
  positive/very positive 57% negative/very negative 22%
  neutral/no response 21%
- **Benefits warrant additional cost of $852 per student:**
  yes 18% no 9%
  don't know 73%
- **Extend CSR to other grades:**
  yes 33% no 23%
  don't know 44%
- **Extend to which other grades:**
  Kindergarten only 20% third grade only 3%
  Kindergarten and third grade 31% all elementary grades 14%
  all grades K-12 18% other 14%
- **Build additional classrooms/schools to accommodate CSR in other grades:**
  yes 37% no 14%
  don't know 49%
- **Had children in regular-sized classes:**
  yes 45% no 55%

QUESTIONS

How do you feel CSR has affected:

		Positive	Negative	No Change
1.	your child's learning to read?	80	10	10
2.	your child's learning math?	79	10	11
3.	your child's learning to express him/herself?	74	14	12
4.	your child's learning to write?	75	12	13
5.	your child's grades?	78	12	10
6.	how well your child likes school?	75	12	13
7.	how well your child gets along with playmates?	75	8	17
8.	your child's interest in schoolwork?	78	13	9
9.	your involvement with the school?	61	12	27
10.	your contacts with teachers?	66	12	22

In your opinion, are there problems with CSR as it affects your child?

yes 9% no 43%
no comment 48%

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